MC decay tagging using generated level information with GenMCTagTool

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ABSTRACT

We present a utility to tag and identify the MC decays using there the generator level information. It also provides a tool to plot the distributions of various backgrounds in a generic MC sample which helps in understanding the background sources. One can simply use some BASF2 variables to separate out the signal and different sources of the background.

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1   Introduction

Identifying the possible sources of background is crucial for any analysis in the high energy physics. In almost all of the analysis, generic MC sample is used to estimate the expected background. To guess or identify the possible background one need to gain or have some experience. In order to identify the background decays chain, one can look at the mother, grand mother IDs of the reconstructed MC particles. But, tagging with reconstructed level information may get failed for partially misreconstructed decays where we reconstruct a fraction of background particles as signal event. Therefore we try to tag a particle decay using the generator level information. If we know that the event is coming from a particular decay chain, we can easily understand or tag the background.

2   Tools used

The following tools have been used to extract the information and plot the shape of the different background in any physical variables.

- Python, C++

- ROOT

- LaTeX

3   Purpose and philosophy

In the BASF2 framework, isSignal module is already present which can identify the MCTruth signal events but has some limitations. If the link between reconstructed and generated level information is broken, we can not use it properly. There are two available packages one can use to understand the background.

TopoAna: One need to dump the whole generated level information and then do offline study to understand background. One need some level of expertise to use it. Further dumping the whole generated level information may lead to increase the size of the root files. Space will be serious issue in future. Also, it may not work properly for a decay linked with neutrino.

Tau decay tagger: There is also an another tool dedicated to tag the tau decays based on the generator level information (without dumping the whole generator level information in the root file). GenMCTag does the similar jobs generically for any particle with automated script.

As per we know, no generic utility is available to separate the decays based on the generator level information. If one can tag the generic MC, one can easily make sense of which background to expect. Philosophy of this utility is similar to the tagging procedure used by "Belle charmonium group". Aim is to have less variables in root files with maximum information. We wrote a python

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script that picks up all the decays corresponding to a particle and generate the module itself. In the present situation, we consider all the B, D meson and τ lepton decays. Further, we can extend our project for any other particle. We also provide a plotting utility which can plot the distributions of different background for any physical variable.

4 Implementation in the BASF2

Tool consists of different level of codes, while the users just need to use the last code.

Basic code generation: We provide a python script which run on the official DECAY.DEC and can identify all the generated decay modes of the particle of interest (for now B^+, B^0, B_s^0, D^{*+}, D_s^+, D^0, and τ^+). Further one can extend to other particles. This generates an automatic C++ code which can now be directly plug into BASF2 as a module. The mentioned python script has to be run only once if the DECAY.DEC get modified or new decay mode is added.

Main module: The automated modules we get from the previous section are placed in the <analysis/utility> and compiled with BASF2. We placed a script (`MCParticleTag.cc`) in the <analysis/variables> to store the tagging information in the BASF2 variables. Table 1 summarizes all the scripts placed in the BASF2 framework.

Modular analysis directory	Scripts included	Purpose
<analysis/utility>	GenBplusTag.cc	To tag B^+, B^-
	GenB0Tag.cc	To tag B^0, $\bar{B}^0$
	GenBsTag.cc	To tag B_s^0, $\bar{B}_s^0$
	GenDTag.cc	To tag D^{*+}, D^{*-}, D_s^+, D_s^-, D^+, D^-, D^0, $\bar{D}^0$
	GenTauTag.cc	To tag τ^+, τ^-
<analysis/variables>	MCParticleTag.cc	Registering variables to get the tagging information

Table 1: Included scripts in the BASF2 framework

Usage: For an existing module, one simply need to add the variables to the ntuple. Table 2 summarizes the registered variables for the listed particles.

Example:

```
B_variable = vu.create_aliases_for_selected(
        list_of_variables = ["BplusMode", "BminusMode"],
        decay_string = "B̂+ > antiD0 pi+")
variablesToNtuple(decayString = "B+:Dpi", variables = B_variable,
        filename = output_file, treename = "dpi", path = my_path)
```

	Particle mode			Anti-particle mode	
Particle	Variable	Decay list	Anti-particle	Variable	Decay list
B^+	BplusMode	Appendix A	B^-	BminusMode	Appendix B
B^0	B0Mode	Appendix C	$\bar{B}^0$	Bbar0Mode	Appendix D
B_s^0	Bs0Mode	Appendix E	$\bar{B}_s^0$	Bsbar0Mode	Appendix F
D^{*+}	DstplusMode	Appendix G	D^{*-}	DstminusMode	Appendix H
D_s^+	DsplusMode	Appendix I	D_s^-	DsminusMode	Appendix J
D^+	DplusMode	Appendix K	D^-	DminusMode	Appendix L
D^0	D0Mode	Appendix M	$\bar{D}^0$	Dbar0Mode	Appendix N
τ^+	TauplusMode	Appendix O	τ^-	TauminusMode	Appendix P

Table 2: Registered variables in the BASF2 framework

5 Demonstration of output

	Particle mode	Anti-particle mode
Particle not found	-99	-99
Decay not found	+(Number of daughters)	-(Number of daughters)
Decay found	+1001 to +$dddd$	-1001 to −$dddd$

Table 3: Representation of particle decays.

Now we already have a number that reflects the information about the corresponding particle. Here we represent all the particle mode (in the Table 2) with positive numbers greater or equals to +1001 and the anti particle modes with numbers less or equals to -1001. If desired particle does not exist in the MC particle list, it reflects -99. For some of the hadronic decays (generated using the PYTHIA), output particles may not be properly defined. If a particle decay does not match with any of the defined decays (considering the above mentioned hadronic decays), it reflects the number of daughters. Table 3 summarizes the strategy for the returned values.

5.1 Neutral B meson mixing

Neutral B meson (B^0) and its anti particle ($\bar{B}^0$) are oscillating between each other. There is a chance to have two B^0 or two $\bar{B}^0$ at any instant. If a situation occurs with two B^0 then both of the modes (B0Mode and Bbar0Mode) will be filled with **positive** numbers ($\geq$1001) depending on the two B^0 decays. For a situation with two $\bar{B}^0$, both of the modes (B0Mode and Bbar0Mode) will be filled with **negative** numbers ($\leq$-1001). For example:

- Let us consider, there are two B^0 instead of $B^0 - \bar{B}^0$.

- One B^0 decays to $D^- \eta \mu^+ \nu_\mu$ (tag no +1035) and another decays to $J/\psi K_S^0$ (tag no +1729) state.

- In that case, B^0 mode variable (**B0Mode**) will be filled with **+1035**.

- $\bar{B}^0$ mode variable (**Bbar0Mode**) will be filled with **+1729**.

5.2 FSR inclusion

Kinematics of the daughter particles may change when there is any final state radiation (FSR) linked with a particular decay vertex. It is important to know the number of FSR photons especially for the events with π^0 in the final state, less charged track multiplicity, missing energy analysis etc. We consider those photons into account for all the decays. If there are FSR photons, the original decay tag number $\pm(dddd)$ will be reflected as $\pm(\mathbf{N}0dddd)$, where **N** implies the number of the FSR photons.

For example:

- If there is any $B^- \to D^+ \pi^- \pi^-$ decay, BminusMode will be represented as **-1735**.

- With 2 FSR photons from the B^- decay vertex, that decay mode will reflected at **-201735**.

- With 3 FSR photons from the B^- decay vertex, that decay mode will reflected at **-301735**.

6 Understanding of background using plotting utility

We also provide a ROOT based utility (plotMCTag.C) as an example to plot all the sources of tagged background. Using this plotting utility, one can easily plot the background by plugging the information stored in the root file. It can also be used outside the BASF2 framework. One has to modify the inputs in the following lines.

```
input_rootfile « "example_input.root";
ntuple_name « "dpi";
plot_variable « "deltaE";
Particle_variable « "BplusMode";
antiParticle_variable « "BminusMode";
double lower_cut = -0.15, upper_cut = 0.15;
int Particle_sigTag = 1730, antiParticle_sigTag = -1730;
get_Particle_decay = B_plus[j]; get_antiParticle_decay = B_minus[j];
```

One has to provide the location of the root file (`input_rootfile`), name of the ntuple (`ntuple_name`), variable to be plotted (`plot_variable`), stored BASF2 tagging variables (`Particle_variable`, `antiParticle_variable`), range of the plots (`lower_cut, upper_cut`), etc. Signal tag numbers (`Particle_sigTag, antiParticle_sigTag`) should be chosen from the Table 2. In the case where signal mode is not included in the generic sample (like searches for new physics), one should choose **999** and **-999** respectively. Further, one can include or exclude the charge conjugate mode. The possible background components are to be plotted in a postscript file with signal components in the green colored histograms. All the component histograms will also be stored as an output root file. As it tags both of the B, D and τ particle in the pair, effective number of tagged particles seems to be doubled for such cases.

7 Case study for the GenMCTagTool

We studied the background of some decays using this tool. In this section, we will discuss those one by one.

7.1 For $B^- \to D^0 \pi^-$ decay

This has been used to understand the background for $B^- \to D^0 \pi^-$ decay by M. Kumar. Here we check the background components for $B^- \to D^0 \pi^-$ decay using the charged sample (MC13) with ΔE variable. As one can see in the Figure 1, signal components have been appeared with green colored histograms. One can then easily identify the possible peaking backgrounds.
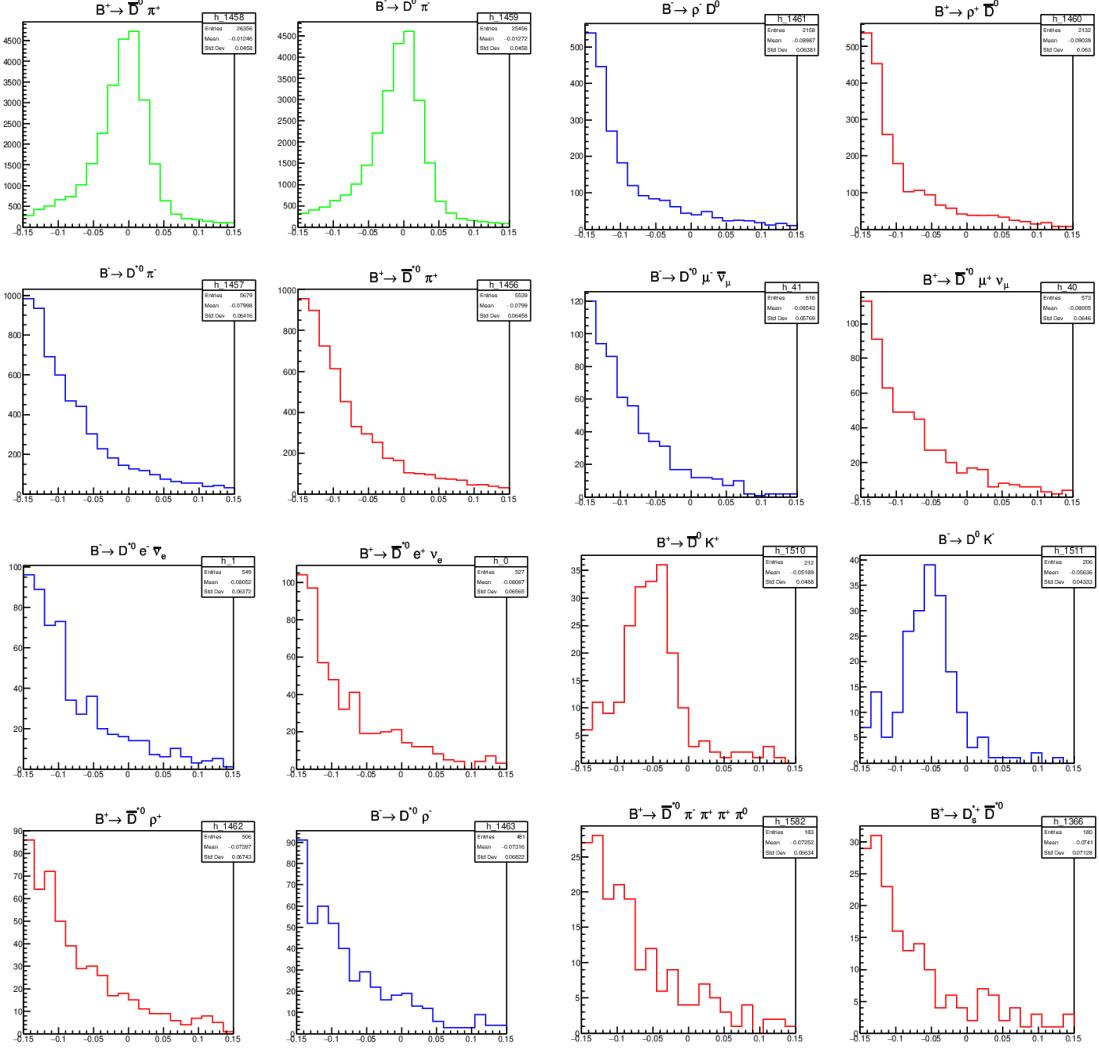
Figure 1: Some $B^{\pm}$ background components for $B^- \to D^0\pi^-$ decay.

7.2   For $D^0 \to K_S^0\pi^+\pi^-$ decay

We check the background components for $D^0 \to K_S^0\pi^+\pi^-$ decay using the $c\bar{c}$ sample (MC12) with ΔM variable. As one can see in the Figure 2, signal components have been appeared with green colored histograms. Here K_S^0 has been reconstructed from the $\pi^+\pi^-$ instead of using the standard K_S^0 functions. Most of background components are expected to be flat near the signal peak. For $D^0 \to \pi^+\pi^-\pi^+\pi^-$ decays, one of the $\pi^+\pi^-$ pairs has been misidentified and hence this mode is peaking in the signal region.

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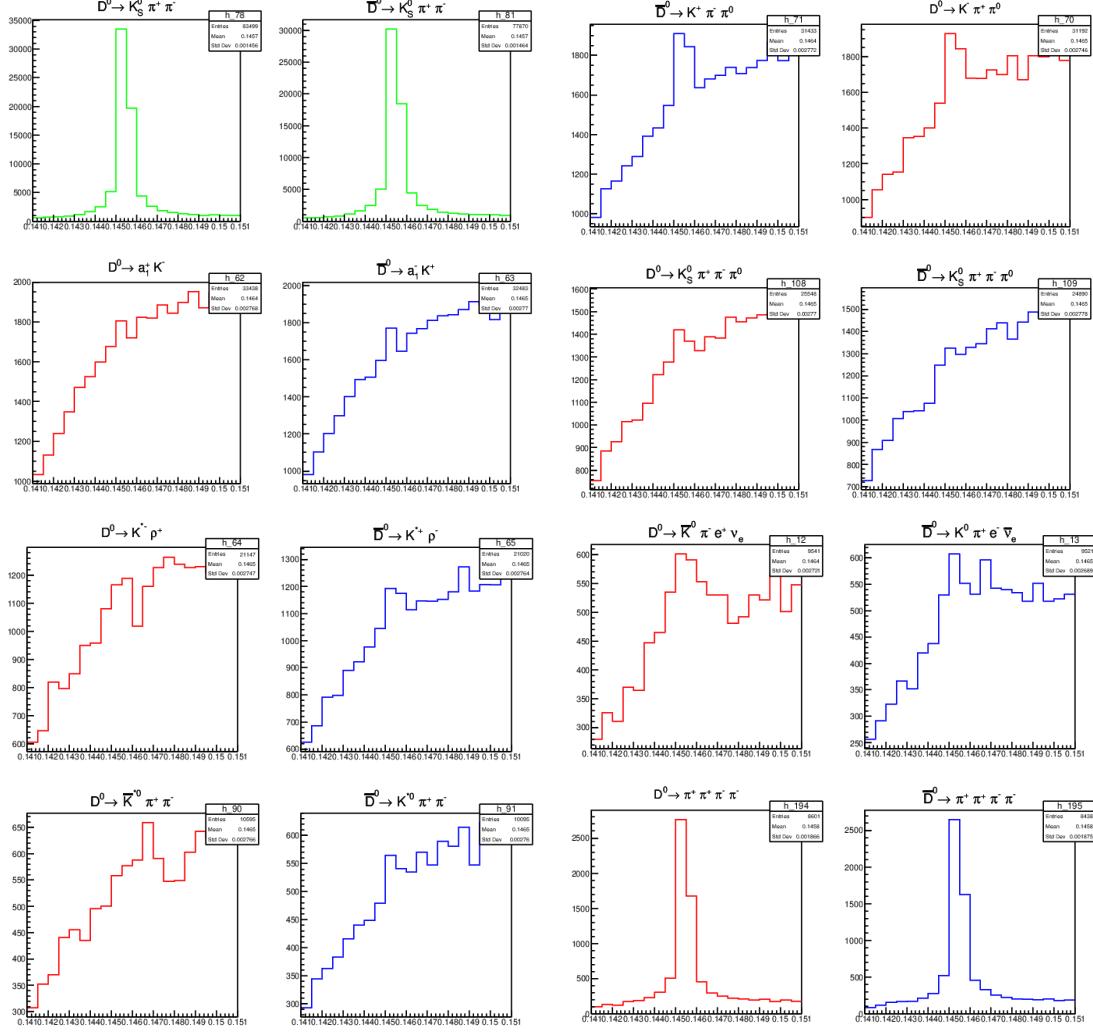
Figure 2: Some D^0 background components for $D^0 \to K_S^0 \pi^+ \pi^-$ decay.

8 Summary

We present a new tool for the background tagging using the generator level information. It also comes with a plotting utility for quick and better understanding of the potential background. We tried outcomes for different decays and find it to be easy and safe all the time. We will be happy to merge this tool to the BASF2 framework to make it available for everyone.

APPENDIX

A   List of tag numbers for B^+ decays

Tag numbers for the 825 B^+ decays are following.

- $\bar{D}^{*0}e^+\nu_e$ +1001
- $\bar{D}^0e^+\nu_e$ +1002
- $\bar{D}^0_1e^+\nu_e$ +1003
- $\bar{D}^{*0}_0e^+\nu_e$ +1004
- $\bar{D}'^0_1e^+\nu_e$ +1005
- $\bar{D}^{*0}_2e^+\nu_e$ +1006
- $D^{*-}\pi^+e^+\nu_e$ +1007
- $\bar{D}^{*0}\pi^0e^+\nu_e$ +1008
- $D^-\pi^+e^+\nu_e$ +1009
- $\bar{D}^0\pi^0e^+\nu_e$ +1010
- $\bar{D}^0\pi^+\pi^-e^+\nu_e$ +1011
- $D^-\pi^+\pi^0e^+\nu_e$ +1012
- $\bar{D}^0\pi^0\pi^0e^+\nu_e$ +1013
- $\bar{D}^{*0}\pi^+\pi^-e^+\nu_e$ +1014
- $D^{*-}\pi^+\pi^0e^+\nu_e$ +1015
- $\bar{D}^{*0}\pi^0\pi^0e^+\nu_e$ +1016
- $D^{*-}_sK^+e^+\nu_e$ +1017
- $D^-_sK^+e^+\nu_e$ +1018
- $\bar{D}^0\eta e^+\nu_e$ +1019
- $\bar{D}^{*0}\eta e^+\nu_e$ +1020
- $\bar{D}^{*0}\mu^+\nu_\mu$ +1021
- $\bar{D}^0\mu^+\nu_\mu$ +1022

- $\bar{D}^0_1\mu^+\nu_\mu$ +1023
- $\bar{D}^{*0}_0\mu^+\nu_\mu$ +1024
- $\bar{D}'^0_1\mu^+\nu_\mu$ +1025
- $\bar{D}^{*0}_2\mu^+\nu_\mu$ +1026
- $D^{*-}\pi^+\mu^+\nu_\mu$ +1027
- $\bar{D}^{*0}\pi^0\mu^+\nu_\mu$ +1028
- $D^-\pi^+\mu^+\nu_\mu$ +1029
- $\bar{D}^0\pi^0\mu^+\nu_\mu$ +1030
- $\bar{D}^0\pi^+\pi^-\mu^+\nu_\mu$ +1031
- $D^-\pi^+\pi^0\mu^+\nu_\mu$ +1032
- $\bar{D}^0\pi^0\pi^0\mu^+\nu_\mu$ +1033
- $\bar{D}^{*0}\pi^+\pi^-\mu^+\nu_\mu$ +1034
- $D^{*-}\pi^+\pi^0\mu^+\nu_\mu$ +1035
- $\bar{D}^{*0}\pi^0\pi^0\mu^+\nu_\mu$ +1036
- $D^{*-}_sK^+\mu^+\nu_\mu$ +1037
- $D^-_sK^+\mu^+\nu_\mu$ +1038
- $\bar{D}^0\eta\mu^+\nu_\mu$ +1039
- $\bar{D}^{*0}\eta\mu^+\nu_\mu$ +1040
- $\bar{D}^{*0}\tau^+\nu_\tau$ +1041
- $\bar{D}^0\tau^+\nu_\tau$ +1042
- $\bar{D}^0_1\tau^+\nu_\tau$ +1043
- $\bar{D}^{*0}_0\tau^+\nu_\tau$ +1044

- $\bar{D}'^0_1\tau^+\nu_\tau$ +1045
- $\bar{D}^{*0}_2\tau^+\nu_\tau$ +1046
- $\pi^0e^+\nu_e$ +1047
- $\eta e^+\nu_e$ +1048
- $\rho^0e^+\nu_e$ +1049
- $\omega e^+\nu_e$ +1050
- $\eta'e^+\nu_e$ +1051
- $\bar{D}(2S)^0e^+\nu_e$ +1052
- $\bar{D}^*(2S)^0e^+\nu_e$ +1053
- $Xu^0e^+\nu_e$ +1054
- $\pi^0\mu^+\nu_\mu$ +1055
- $\eta\mu^+\nu_\mu$ +1056
- $\rho^0\mu^+\nu_\mu$ +1057
- $\omega\mu^+\nu_\mu$ +1058
- $\eta'\mu^+\nu_\mu$ +1059
- $\bar{D}(2S)^0\mu^+\nu_\mu$ +1060
- $\bar{D}^*(2S)^0\mu^+\nu_\mu$ +1061
- $Xu^0\mu^+\nu_\mu$ +1062
- $\pi^0\tau^+\nu_\tau$ +1063
- $\eta\tau^+\nu_\tau$ +1064
- $\rho^0\tau^+\nu_\tau$ +1065
- $\omega\tau^+\nu_\tau$ +1066
- $\eta'\tau^+\nu_\tau$ +1067

- $a_1^0 \tau^+ \nu_\tau$ +1068
- $b_1^0 \tau^+ \nu_\tau$ +1069
- $a_0^0 \tau^+ \nu_\tau$ +1070
- $f_0 \tau^+ \nu_\tau$ +1071
- $f'_0 \tau^+ \nu_\tau$ +1072
- $f_1 \tau^+ \nu_\tau$ +1073
- $f'_1 \tau^+ \nu_\tau$ +1074
- $h_1 \tau^+ \nu_\tau$ +1075
- $h'_1 \tau^+ \nu_\tau$ +1076
- $f_2 \tau^+ \nu_\tau$ +1077
- $f'_2 \tau^+ \nu_\tau$ +1078
- $\bar{D}(2S)^0 \tau^+ \nu_\tau$ +1079
- $\bar{D}^*(2S)^0 \tau^+ \nu_\tau$ +1080
- $D_s^+ \pi^0$ +1081
- $D_s^{*+} \pi^0$ +1082
- $\rho^0 D_s^+$ +1083
- $D_s^{*+} \rho^0$ +1084
- $K^{*+} \gamma$ +1085
- $K_1^+ \gamma$ +1086
- $K_2^{*+} \gamma$ +1087
- $\rho^+ \gamma$ +1088
- $K'^{+}_1 \gamma$ +1089
- $K'^{*+} \gamma$ +1090
- $K''^{*+} \gamma$ +1091
- $Xsu\gamma$ +1092

- $K^+ e^+ e^-$ +1093
- $\pi^+ e^+ e^-$ +1094
- $K^{*+} e^+ e^-$ +1095
- $K^+ \pi^+ \pi^- e^+ e^-$ +1096
- $K^+ \pi^0 \pi^0 e^+ e^-$ +1097
- $K^+ \phi e^+ e^-$ +1098
- $Xsu e^+ e^-$ +1099
- $K^+ \mu^+ \mu^-$ +1100
- $\pi^+ \mu^+ \mu^-$ +1101
- $K^{*+} \mu^+ \mu^-$ +1102
- $K^+ \pi^+ \pi^- \mu^+ \mu^-$ +1103
- $K^+ \pi^0 \pi^0 \mu^+ \mu^-$ +1104
- $K^+ \phi \mu^+ \mu^-$ +1105
- $Xsu \mu^+ \mu^-$ +1106
- $K^+ \tau^+ \tau^-$ +1107
- $K^{*+} \tau^+ \tau^-$ +1108
- $Xsu \tau^+ \tau^-$ +1109
- $\tau^+ \nu_\tau$ +1110
- $\mu^+ \nu_\mu$ +1111
- $e^+ \nu_e$ +1112
- $\pi^+ \pi^0 \pi^0$ +1113
- $\pi^+ \pi^+ \pi^-$ +1114
- $\eta \pi^+$ +1115
- ηK^+ +1116
- $K^{*+} \eta$ +1117

- $\rho^+ \eta$ +1118
- $\eta' \pi^+$ +1119
- $\eta' K^+$ +1120
- $K^{*+} \eta'$ +1121
- $\rho^+ \eta'$ +1122
- $\omega \pi^+$ +1123
- ωK^+ +1124
- ωK^{*+} +1125
- $\omega \rho^+$ +1126
- $\phi \pi^+$ +1127
- ϕK^+ +1128
- $K^0 \pi^+$ +1129
- $K_S^0 \pi^+$ +1130
- $K_L^0 \pi^+$ +1131
- $\bar{K}^0 K^+$ +1132
- $\pi^+ \pi^0$ +1133
- $K^+ \pi^0$ +1134
- $\rho^0 \pi^+$ +1135
- $\rho^0 K^+$ +1136
- $\rho^+ \pi^0$ +1137
- $\rho^+ K^0$ +1138
- $\rho(2S)^0 \pi^+$ +1139
- $\rho(2S)^0 K^+$ +1140
- $f_0 \pi^+$ +1141
- $f_0 K^+$ +1142

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- $a_0^+ K^0$ +1143
- $a_0^0 K^+$ +1144
- $a_0^0 \pi^+$ +1145
- $a_0^+ \pi^0$ +1146
- $f_2 \pi^+$ +1147
- $K_0^{*0} \pi^+$ +1148
- $\bar{K}_0^{*0} K^+$ +1149
- $K_0^{*+} \pi^0$ +1150
- $K_0^{*+} \bar{K}^0$ +1151
- $K^{*+} \pi^0$ +1152
- $K^{*+} \bar{K}^0$ +1153
- $K^+ \pi^- \pi^+$ +1154
- $K^+ K^- \pi^+$ +1155
- $K^+ K^- K^+$ +1156
- $K^+ K^+ \pi^-$ +1157
- $K^- \pi^+ \pi^+$ +1158
- $K^+ \bar{K}^0 \pi^0$ +1159
- $K^+ \bar{K}^0 \eta$ +1160
- $K^+ \bar{K}^0 \eta'$ +1161
- $\pi^+ K^0 \pi^0$ +1162
- $\pi^+ K^0 \eta$ +1163
- $\pi^+ K^0 \eta'$ +1164
- $\pi^+ \pi^0 \eta$ +1165
- $\pi^+ \pi^0 \eta'$ +1166
- $\pi^+ \eta \eta$ +1167

- $\pi^+ \eta \eta'$ +1168
- $K^+ \pi^0 \pi^0$ +1169
- $K^+ \pi^0 \eta$ +1170
- $K^+ \pi^0 \eta'$ +1171
- $K^+ \eta \eta$ +1172
- $K^+ \eta \eta'$ +1173
- $K^+ \eta' \eta'$ +1174
- $K^+ K^0 \bar{K}^0$ +1175
- $\pi^+ K^0 \bar{K}^0$ +1176
- $\rho^+ \rho^0$ +1177
- $\rho^0 \pi^+ \pi^0$ +1178
- $\rho^0 \pi^+ \eta$ +1179
- $\rho^0 \pi^+ \eta'$ +1180
- $\omega \pi^+ \pi^0$ +1181
- $\omega \pi^+ \eta$ +1182
- $\omega \pi^+ \eta'$ +1183
- $\rho^+ \pi^+ \pi^-$ +1184
- $\rho^- \pi^+ \pi^+$ +1185
- $\rho^+ \pi^0 \pi^0$ +1186
- $\rho^+ \pi^0 \eta$ +1187
- $\rho^+ \eta \eta$ +1188
- $\rho^+ \pi^0 \eta'$ +1189
- $\pi^- \pi^+ \pi^+ \pi^0$ +1190
- $\pi^- \pi^+ \pi^+ \eta$ +1191
- $\pi^- \pi^+ \pi^+ \eta'$ +1192

- $\pi^+ \pi^0 \pi^0 \pi^0$ +1193
- $\pi^+ \eta \pi^0 \pi^0$ +1194
- $\pi^+ \eta \eta \pi^0$ +1195
- $\pi^+ \eta' \pi^0 \pi^0$ +1196
- $\pi^+ \eta' \eta \pi^0$ +1197
- $a_1^0 \pi^+$ +1198
- $a_1^+ \pi^0$ +1199
- $b_1^0 \pi^+$ +1200
- $b_1^+ \pi^0$ +1201
- $\rho^+ f_0$ +1202
- $\rho^+ a_0^0$ +1203
- $\rho^0 a_0^+$ +1204
- $f_0 \pi^+ \pi^0$ +1205
- $a_0^0 \pi^+ \pi^0$ +1206
- $a_0^+ \pi^0 \pi^0$ +1207
- $a_0^- \pi^+ \pi^+$ +1208
- $\rho^+ K^{*0}$ +1209
- $\rho^0 K^{*+}$ +1210
- $\pi^+ \pi^0 K^{*0}$ +1211
- $\pi^+ \eta K^{*0}$ +1212
- $\pi^- \pi^+ K^{*+}$ +1213
- $\pi^0 \pi^0 K^{*+}$ +1214
- $\pi^0 \eta K^{*+}$ +1215
- $\eta \eta K^{*+}$ +1216
- $\pi^0 \eta' K^{*+}$ +1217

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- $\eta\eta' K^{*+}$ $+1218$
- $\rho^+ K^0 \pi^0$ $+1219$
- $\rho^+ K^0 \eta$ $+1220$
- $\rho^+ K^0 \eta'$ $+1221$
- $\rho^+ K^+ \pi^-$ $+1222$
- $\rho^- K^+ \pi^+$ $+1223$
- $\rho^0 K^0 \pi^+$ $+1224$
- $\rho^0 K^+ \pi^0$ $+1225$
- $\rho^0 K^+ \eta$ $+1226$
- $\rho^0 K^+ \eta'$ $+1227$
- $\omega K^0 \pi^+$ $+1228$
- $\omega K^+ \pi^0$ $+1229$
- $\omega K^+ \eta$ $+1230$
- $\omega K^+ \eta'$ $+1231$
- $\pi^+ \pi^+ \pi^- K^0$ $+1232$
- $\pi^+ \pi^0 \pi^0 K^0$ $+1233$
- $\pi^+ \eta \pi^0 K^0$ $+1234$
- $\pi^+ \eta \eta K^0$ $+1235$
- $\pi^+ \pi^- \pi^0 K^+$ $+1236$
- $\pi^+ \pi^- \eta K^+$ $+1237$
- $\pi^0 \pi^0 \pi^0 K^+$ $+1238$
- $\pi^0 \pi^0 \eta K^+$ $+1239$
- $\pi^0 \eta \eta K^+$ $+1240$
- $\pi^0 \pi^0 \eta' K^+$ $+1241$
- $\pi^0 \eta \eta' K^+$ $+1242$

- $\rho^+ K_0^{*0}$ $+1243$
- $\rho^0 K_0^{*+}$ $+1244$
- $\pi^+ \pi^0 K_0^{*0}$ $+1245$
- $\pi^0 \pi^0 K_0^{*+}$ $+1246$
- $K^{*+} f_0$ $+1247$
- $a_1^0 K^+$ $+1248$
- $a_1^+ K^0$ $+1249$
- $b_1^0 K^+$ $+1250$
- $b_1^+ K^0$ $+1251$
- $K^{*+} a_0^0$ $+1252$
- $K^{*0} a_0^+$ $+1253$
- $\bar{K}^{*0} K^{*+}$ $+1254$
- $\phi \rho^+$ $+1255$
- $\phi \pi^+ \pi^0$ $+1256$
- $\phi \pi^+ \eta$ $+1257$
- $\phi \pi^+ \eta'$ $+1258$
- $K^+ K^- \rho^+$ $+1259$
- $K^0 \bar{K}^0 \rho^+$ $+1260$
- $\bar{K}^0 K^+ \rho^0$ $+1261$
- $\bar{K}^0 K^+ \omega$ $+1262$
- $K^+ K^- \pi^+ \pi^0$ $+1263$
- $K^+ K^- \pi^+ \eta$ $+1264$
- $K^+ K^- \pi^+ \eta'$ $+1265$
- $K^0 \bar{K}^0 \pi^+ \pi^0$ $+1266$
- $K^0 \bar{K}^0 \pi^+ \eta$ $+1267$

- $K^0 \bar{K}^0 \pi^+ \eta'$ $+1268$
- $\bar{K}^0 K^+ \pi^+ \pi^-$ $+1269$
- $\bar{K}^0 K^+ \pi^0 \pi^0$ $+1270$
- $\bar{K}^0 K^+ \pi^0 \eta$ $+1271$
- $\bar{K}^0 K^+ \eta \eta$ $+1272$
- $\bar{K}^0 K^+ \pi^0 \eta'$ $+1273$
- $\bar{K}^0 K^+ \eta \eta'$ $+1274$
- $K^{*+} K^- \pi^+$ $+1275$
- $K^{*-} K^+ \pi^+$ $+1276$
- $K^{*0} \bar{K}^0 \pi^+$ $+1277$
- $K^0 \bar{K}^{*0} \pi^+$ $+1278$
- $K^+ \bar{K}^{*0} \pi^0$ $+1279$
- $K^+ \bar{K}^{*0} \eta$ $+1280$
- $K^+ \bar{K}^{*0} \eta'$ $+1281$
- $K^{*+} \bar{K}^0 \pi^0$ $+1282$
- $K^{*+} \bar{K}^0 \eta$ $+1283$
- $K^{*+} \bar{K}^0 \eta'$ $+1284$
- ϕK^{*+} $+1285$
- $\phi K^0 \pi^+$ $+1286$
- $\phi K^+ \pi^0$ $+1287$
- $\phi K^+ \eta$ $+1288$
- $\phi K^+ \eta'$ $+1289$
- $K^- K^+ K^{*+}$ $+1290$
- $K^+ K^{*-} K^+$ $+1291$
- $K^+ K^{*0} \bar{K}^0$ $+1292$

- $K^+ K^0 \bar{K}^{*0}$ +1293
- $K^0 K^{*+} \bar{K}^0$ +1294
- $K^+ K^- K^+ \pi^0$ +1295
- $K^+ K^- K^+ \eta$ +1296
- $K^+ K^- K^+ \eta'$ +1297
- $K^+ K^- K^0 \pi^+$ +1298
- $K^0 \bar{K}^0 K^+ \pi^0$ +1299
- $K^0 \bar{K}^0 K^+ \eta$ +1300
- $K^0 \bar{K}^0 K^+ \eta'$ +1301
- $K^0 \bar{K}^0 K^0 \pi^+$ +1302
- ϕK_0^{*+} +1303
- $K^- K^+ K_0^{*+}$ +1304
- $K^+ K^+ K_0^{*-}$ +1305
- $K^+ \bar{K}_0^{*0} K^0$ +1306
- $K^+ K_0^{*0} \bar{K}^0$ +1307
- $\phi K_1'^+$ +1308
- $K^- K^+ K_1'^+$ +1309
- $\phi \bar{K}^0 K^+$ +1310
- $K^+ K^- K^+ \bar{K}^0$ +1311
- $K^0 \bar{K}^0 \bar{K}^0 K^+$ +1312
- $\rho^0 \rho^0 \pi^+$ +1313
- $\rho^+ \rho^0 \pi^0$ +1314
- $\rho^+ \rho^0 \eta$ +1315
- $\rho^+ \rho^0 \eta'$ +1316
- $\rho^+ \rho^- \pi^+$ +1317

- $\omega \rho^0 \pi^+$ +1318
- $\omega \rho^+ \pi^0$ +1319
- $\omega \rho^+ \eta$ +1320
- $\omega \rho^+ \eta'$ +1321
- $\rho^0 \pi^+ \pi^- \pi^+$ +1322
- $\rho^0 \pi^+ \pi^0 \pi^0$ +1323
- $\rho^0 \pi^+ \eta \pi^0$ +1324
- $\rho^0 \pi^+ \eta' \pi^0$ +1325
- $\omega \pi^+ \pi^0 \pi^0$ +1326
- $\omega \pi^+ \eta \pi^0$ +1327
- $\omega \pi^+ \eta' \pi^0$ +1328
- $\rho^- \pi^+ \pi^+ \pi^0$ +1329
- $\rho^- \pi^+ \pi^+ \eta$ +1330
- $\rho^- \pi^+ \pi^+ \eta'$ +1331
- $\rho^+ \pi^+ \pi^- \pi^0$ +1332
- $\rho^+ \pi^+ \pi^- \eta$ +1333
- $\rho^+ \pi^+ \pi^- \eta'$ +1334
- $\rho^+ \pi^0 \pi^0 \pi^0$ +1335
- $\rho^+ \pi^0 \eta \pi^0$ +1336
- $\rho^+ \eta \eta \pi^0$ +1337
- $\rho^+ \pi^0 \eta' \pi^0$ +1338
- $\pi^- \pi^+ \pi^+ \pi^0 \pi^0$ +1339
- $\pi^- \pi^+ \pi^+ \eta \pi^0$ +1340
- $\pi^- \pi^+ \pi^+ \eta' \pi^0$ +1341
- $\pi^+ \pi^0 \pi^0 \pi^0 \pi^0$ +1342

- $\pi^+ \eta \pi^0 \pi^0 \pi^0$ +1343
- $\pi^+ \eta' \pi^0 \pi^0 \pi^0$ +1344
- $a_1^+ \rho^0$ +1345
- $a_1^+ \omega$ +1346
- $a_1^+ f_0$ +1347
- $a_1^0 \pi^+ \pi^0$ +1348
- $a_1^0 \pi^+ \eta$ +1349
- $a_1^0 \pi^+ \eta'$ +1350
- $a_1^- \pi^+ \pi^+$ +1351
- $a_1^+ \pi^+ \pi^-$ +1352
- $a_1^+ \pi^0 \pi^0$ +1353
- $a_1^+ \pi^0 \eta$ +1354
- $a_1^+ \pi^0 \eta'$ +1355
- $\rho^+ f_0 \pi^0$ +1356
- $\rho^+ f_0 \eta$ +1357
- $\rho^+ f_0 \eta'$ +1358
- $\rho^0 f_0 \pi^+$ +1359
- $\omega f_0 \pi^+$ +1360
- $\rho^0 a_0^0 \pi^0$ +1361
- $\rho^+ a_0^0 \eta$ +1362
- $\rho^+ a_0^0 \eta'$ +1363
- $\rho^- a_0^+ \pi^+$ +1364
- $\rho^0 a_0^+ \pi^0$ +1365
- $\rho^0 a_0^+ \eta$ +1366
- $\rho^0 a_0^+ \eta'$ +1367

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- $f_0\pi^+\pi^-\pi^+$ +1368
- $f_0\pi^+\pi^0\pi^0$ +1369
- $f_0\pi^+\pi^0\eta$ +1370
- $f_0\pi^+\pi^0\eta'$ +1371
- $a_0^0\pi^+\pi^0\pi^0$ +1372
- $a_0^+\pi^0\pi^0\pi^0$ +1373
- $a_0^-\pi^+\pi^+\pi^0$ +1374
- $\rho^+K^{*+}\pi^-$ +1375
- $\rho^-K^{*+}\pi^+$ +1376
- $\rho^+K^{*0}\pi^0$ +1377
- $\rho^+K^{*0}\eta$ +1378
- $\rho^+K^{*0}\eta'$ +1379
- $\rho^0K^{*0}\pi^+$ +1380
- $\rho^0K^{*+}\pi^0$ +1381
- $\rho^0K^{*+}\eta$ +1382
- $\rho^0K^{*+}\eta'$ +1383
- $\omega K^{*0}\pi^+$ +1384
- $\omega K^{*+}\pi^0$ +1385
- $\omega K^{*+}\eta$ +1386
- $\omega K^{*+}\eta'$ +1387
- $\pi^+\pi^-K^{*0}\pi^+$ +1388
- $\pi^+\pi^0K^{*0}\pi^0$ +1389
- $\pi^+\eta K^{*0}\pi^0$ +1390
- $\pi^+\eta'K^{*0}\pi^0$ +1391
- $\pi^-\pi^+K^{*+}\pi^0$ +1392

- $\pi^-\pi^+K^{*+}\eta$ +1393
- $\pi^-\pi^+K^{*+}\eta'$ +1394
- $\pi^0\pi^0K^{*+}\pi^0$ +1395
- $\pi^0\eta K^{*+}\pi^0$ +1396
- $\eta\eta K^{*+}\pi^0$ +1397
- $\pi^0\eta'K^{*+}\pi^0$ +1398
- $\eta\eta'K^{*+}\pi^0$ +1399
- $\rho^+K^0\pi^+\pi^-$ +1400
- $\rho^+K^0\pi^0\pi^0$ +1401
- $\rho^+K^0\eta\pi^0$ +1402
- $\rho^+K^0\eta'\pi^0$ +1403
- $\rho^+K^+\pi^-\pi^0$ +1404
- $\rho^-K^+\pi^+\pi^0$ +1405
- $\rho^-K^0\pi^+\pi^+$ +1406
- $\rho^0K^0\pi^+\pi^0$ +1407
- $\rho^0K^+\pi^0\pi^0$ +1408
- $\rho^0K^+\eta\pi^0$ +1409
- $\rho^0K^+\eta'\pi^0$ +1410
- $\omega K^0\pi^+\pi^0$ +1411
- $\omega K^+\pi^0\pi^0$ +1412
- $\omega K^+\eta\pi^0$ +1413
- $\omega K^+\eta'\pi^0$ +1414
- $\pi^+\pi^+\pi^-K^0\pi^0$ +1415
- $\pi^+\pi^+\pi^-K^0\eta$ +1416
- $\pi^+\pi^+\pi^-K^0\eta'$ +1417

- $\pi^+\pi^0\pi^0K^0\pi^0$ +1418
- $\pi^+\eta\pi^0K^0\pi^0$ +1419
- $\pi^+\eta\eta K^0\pi^0$ +1420
- $\pi^+\pi^-\pi^+K^+\pi^-$ +1421
- $\pi^+\pi^-\pi^0K^+\pi^0$ +1422
- $\pi^+\pi^-\eta K^+\pi^0$ +1423
- $\pi^+\pi^-\eta'K^+\pi^0$ +1424
- $\pi^0\pi^0\pi^0K^+\pi^0$ +1425
- $\pi^0\pi^0\eta K^+\pi^0$ +1426
- $\pi^0\eta\eta K^+\pi^0$ +1427
- $\pi^0\pi^0\eta'K^+\pi^0$ +1428
- $\pi^0\eta\eta'K^+\pi^0$ +1429
- $\rho^0K_0^{*0}\pi^+$ +1430
- $\rho^+K_0^{*0}\pi^0$ +1431
- $\rho^+K_0^{*0}\eta$ +1432
- $\rho^+K_0^{*0}\eta'$ +1433
- $\rho^+K_0^{*+}\pi^-$ +1434
- $\rho^0K_0^{*+}\pi^0$ +1435
- $\rho^0K_0^{*+}\eta$ +1436
- $\rho^0K_0^{*+}\eta'$ +1437
- $\pi^+\pi^+K_0^{*0}\pi^-$ +1438
- $\pi^+\pi^0K_0^{*0}\pi^0$ +1439
- $\pi^+\pi^0K_0^{*0}\eta$ +1440
- $\pi^+\pi^0K_0^{*0}\eta'$ +1441
- $\pi^0\pi^0K_0^{*+}\pi^0$ +1442

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- $\pi^0\pi^0 K_0^{*+}\eta$ +1443
- $\pi^0\pi^0 K_0^{*+}\eta'$ +1444
- $K^{*0} f_0 \pi^+$ +1445
- $K^{*+} f_0 \pi^0$ +1446
- $K^{*+} f_0 \eta$ +1447
- $K^{*+} f_0 \eta'$ +1448
- $a_1^0 K^{*+}$ +1449
- $a_1^0 K^+ \pi^0$ +1450
- $a_1^0 K^0 \pi^+$ +1451
- $a_1^+ K^{*0}$ +1452
- $a_1^+ K^+ \pi^-$ +1453
- $a_1^+ K^0 \pi^0$ +1454
- $K^{*+} a_0^0 \pi^0$ +1455
- $K^{*0} a_0^+ \pi^0$ +1456
- $K^{*0} \bar{K}^{*0} \pi^+$ +1457
- $\bar{K}^{*0} K^{*+} \pi^0$ +1458
- $\bar{K}^{*0} K^{*+} \eta$ +1459
- $\bar{K}^{*0} K^{*+} \eta'$ +1460
- $\phi \rho^0 \pi^+$ +1461
- $\phi \omega \pi^+$ +1462
- $\phi f_0 \pi^+$ +1463
- $\phi \rho^+ \pi^0$ +1464
- $\phi \rho^+ \eta$ +1465
- $\phi \rho^+ \eta'$ +1466
- $\phi \pi^+ \pi^- \pi^+$ +1467

- $\phi \pi^+ \pi^0 \pi^0$ +1468
- $\phi \pi^+ \eta \pi^0$ +1469
- $\phi \pi^+ \eta' \pi^0$ +1470
- $\bar{K}^0 K^+ \rho^+ \pi^-$ +1471
- $\bar{K}^0 K^+ \rho^- \pi^+$ +1472
- $\bar{K}^0 K^+ \rho^0 \pi^0$ +1473
- $\bar{K}^0 K^+ \rho^0 \eta$ +1474
- $\bar{K}^0 K^+ \rho^0 \eta'$ +1475
- $\bar{K}^0 K^+ \omega \pi^0$ +1476
- $\bar{K}^0 K^+ f_0 \pi^0$ +1477
- $K^+ K^- \rho^0 \pi^+$ +1478
- $K^+ K^- \rho^+ \pi^0$ +1479
- $K^+ K^- \rho^+ \eta$ +1480
- $K^+ K^- \rho^+ \eta'$ +1481
- $K^+ K^- \omega \pi^+$ +1482
- $K^0 \bar{K}^0 \rho^0 \pi^+$ +1483
- $K^0 \bar{K}^0 \omega \pi^+$ +1484
- $K^0 \bar{K}^0 f_0 \pi^+$ +1485
- $K^0 \bar{K}^0 \rho^+ \pi^0$ +1486
- $K^0 \bar{K}^0 \rho^+ \eta$ +1487
- $K^0 \bar{K}^0 \rho^+ \eta'$ +1488
- $K^0 K^- \rho^+ \pi^+$ +1489
- $K^0 K^- \pi^+ \pi^+ \pi^0$ +1490
- $K^0 K^- \pi^+ \pi^+ \eta$ +1491
- $K^0 K^- \pi^+ \pi^+ \eta'$ +1492

- $K^+ K^- \pi^+ \pi^- \pi^+$ +1493
- $K^+ K^- \pi^+ \pi^0 \pi^0$ +1494
- $K^+ K^- \pi^+ \eta \pi^0$ +1495
- $K^+ K^- \pi^+ \eta' \pi^0$ +1496
- $K^0 \bar{K}^0 \pi^+ \pi^- \pi^+$ +1497
- $K^0 \bar{K}^0 \pi^+ \pi^0 \pi^0$ +1498
- $K^0 \bar{K}^0 \pi^+ \eta \pi^0$ +1499
- $K^0 \bar{K}^0 \pi^+ \eta' \pi^0$ +1500
- $\bar{K}^0 K^+ \pi^+ \pi^- \pi^0$ +1501
- $\bar{K}^0 K^+ \pi^+ \pi^- \eta$ +1502
- $\bar{K}^0 K^+ \pi^+ \pi^- \eta'$ +1503
- $\bar{K}^0 K^+ \pi^0 \pi^0 \pi^0$ +1504
- $\bar{K}^0 K^+ \pi^0 \eta \pi^0$ +1505
- $\bar{K}^0 K^+ \pi^0 \eta' \pi^0$ +1506
- $K^{*0} K^- \pi^+ \pi^+$ +1507
- $K^{*-} K^0 \pi^+ \pi^+$ +1508
- $K^{*+} K^- \pi^+ \pi^0$ +1509
- $K^{*-} K^+ \pi^+ \pi^0$ +1510
- $K^{*0} \bar{K}^0 \pi^+ \pi^0$ +1511
- $K^0 \bar{K}^{*0} \pi^+ \pi^0$ +1512
- $K^+ \bar{K}^{*0} \pi^0 \pi^0$ +1513
- $K^+ \bar{K}^{*0} \eta \pi^0$ +1514
- $K^+ \bar{K}^{*0} \eta' \pi^0$ +1515
- $K^{*+} \bar{K}^0 \pi^0 \pi^0$ +1516
- $K^{*+} \bar{K}^0 \eta \pi^0$ +1517

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- $K^{*+}\bar{K}^0\eta'\pi^0$ +1518
- $\phi K^{*+}\pi^0$ +1519
- $\phi K^+\rho^0$ +1520
- $\phi K^+\omega$ +1521
- $\phi K^+ f_0$ +1522
- $\phi K^0\rho^+$ +1523
- $\phi K^0\pi^+\pi^0$ +1524
- $\phi K^+\pi^+\pi^-$ +1525
- $\phi K^+\pi^0\pi^0$ +1526
- $\phi K^+\eta\pi^0$ +1527
- $\phi K^+\eta'\pi^0$ +1528
- $K^-K^+K^{*+}\pi^0$ +1529
- $K^+K^{*-}K^+\pi^0$ +1530
- $K^+K^{*0}\bar{K}^0\pi^0$ +1531
- $K^+K^0\bar{K}^{*0}\pi^0$ +1532
- $K^0K^{*+}\bar{K}^0\pi^0$ +1533
- $K^-K^+K^+\rho^0$ +1534
- $K^-K^+K^+\omega$ +1535
- $K^-K^+K^+ f_0$ +1536
- $K^-K^+K^0\rho^+$ +1537
- $K^+K^-K^+\pi^0\pi^0$ +1538
- $K^+K^-K^+\eta\pi^0$ +1539
- $K^+K^-K^+\eta'\pi^0$ +1540
- $K^+K^-K^0\pi^+\pi^0$ +1541
- $K^0\bar{K}^0K^+\pi^0\pi^0$ +1542

- $K^0\bar{K}^0K^+\eta\pi^0$ +1543
- $K^0\bar{K}^0K^+\eta'\pi^0$ +1544
- $K^0\bar{K}^0K^0\pi^+\pi^0$ +1545
- $\phi K_0^{*0}\pi^+$ +1546
- $\phi K_0^{*+}\pi^0$ +1547
- $\phi K_0^{*+}\eta$ +1548
- $\phi K_0^{*+}\eta'$ +1549
- $K^-K^+K_0^{*+}\pi^0$ +1550
- $K^-K^+K_0^{*+}\eta$ +1551
- $K^-K^+K_0^{*+}\eta'$ +1552
- $K^+K^+K_0^{*-}\pi^0$ +1553
- $K^+K^+K_0^{*-}\eta$ +1554
- $K^+K^+K_0^{*-}\eta'$ +1555
- $K^-K^+K_0^{*0}\pi^+$ +1556
- $K^+K^+\bar{K}_0^{*0}\pi^-$ +1557
- $K^0K^0\bar{K}_0^{*0}\pi^+$ +1558
- $K^+\bar{K}_0^{*0}K^0\pi^0$ +1559
- $K^+\bar{K}_0^{*0}K^0\eta$ +1560
- $K^+\bar{K}_0^{*0}K^0\eta'$ +1561
- $K^+K_0^{*0}\bar{K}^0\pi^0$ +1562
- $K^+K_0^{*0}\bar{K}^0\eta$ +1563
- $K^+K_0^{*0}\bar{K}^0\eta'$ +1564
- $\phi K_1'^0\pi^+$ +1565
- $\phi K_1'^+\pi^0$ +1566
- $\phi K_1'^+\eta$ +1567

- $\phi K_1'^+\eta'$ +1568
- $K^-K^+K_1'^0\pi^+$ +1569
- $K^-K^+K_1'^+\pi^0$ +1570
- $K^-K^+K_1'^+\eta$ +1571
- $K^-K^+K_1'^+\eta'$ +1572
- $K^+K^+K_1'^-\pi^0$ +1573
- $K^+K^+\bar{K}_1'^0\pi^-$ +1574
- $K^0\bar{K}^0K_1'^0\pi^+$ +1575
- $K^0\bar{K}^0K_1'^+\pi^0$ +1576
- $K^0\bar{K}^0K_1'^+\eta$ +1577
- $K^0\bar{K}^0K_1'^+\eta'$ +1578
- $K^0K^0\bar{K}_1'^0\pi^+$ +1579
- $\bar{K}^0\bar{K}^0K_1'^+\pi^0$ +1580
- $\bar{K}^0\bar{K}^0K_1'^+\eta$ +1581
- $\bar{K}^0\bar{K}^0K_1'^+\eta'$ +1582
- $K^+K^0\bar{K}_1'^0\pi^0$ +1583
- $K^+K^0\bar{K}_1'^0\eta$ +1584
- $K^+K^0\bar{K}_1'^0\eta'$ +1585
- $K^+K_1'^0\bar{K}^0\pi^0$ +1586
- $K^+K_1'^0\bar{K}^0\eta$ +1587
- $K^+K_1'^0\bar{K}^0\eta'$ +1588
- $\phi\phi K^+$ +1589
- $\phi\phi\pi^+$ +1590
- $\phi K^+K^-K^+$ +1591
- $\phi K^0\bar{K}^0K^+$ +1592

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- $\phi K^0 \bar{K}^0 \pi^+$ +1593
- $\phi \bar{K}^0 K^+ \pi^0$ +1594
- $K^+ K^- K^+ K^- \pi^+$ +1595
- $K^+ K^- K^0 \bar{K}^0 \pi^+$ +1596
- $K^+ K^- K^+ \bar{K}^0 \pi^0$ +1597
- $K^0 \bar{K}^0 \bar{K}^0 K^+ \pi^0$ +1598
- $\phi \phi K^{*+}$ +1599
- $\phi K^+ K^- K^{*+}$ +1600
- $\phi K^0 \bar{K}^0 K^{*+}$ +1601
- $\phi \bar{K}^0 K^+ K^{*0}$ +1602
- $\phi K^+ K^- K^+ \pi^0$ +1603
- $\phi K^+ K^- K^0 \pi^+$ +1604
- $\phi K^0 \bar{K}^0 K^+ \pi^0$ +1605
- $\phi K^0 \bar{K}^0 K^0 \pi^+$ +1606
- $\phi \bar{K}^0 K^+ K^+ \pi^-$ +1607
- $a_1^+ a_1^0$ +1608
- $J/\psi K^+$ +1609
- $J/\psi K^{*+}$ +1610
- $J/\psi \pi^+$ +1611
- $J/\psi \rho^+$ +1612
- $J/\psi K^0 \pi^+$ +1613
- $J/\psi K^+ \pi^0$ +1614
- $J/\psi K_1'^+$ +1615
- $J/\psi K_2^{*+}$ +1616
- $J/\psi K_1^+$ +1617
- $J/\psi K^+ \pi^+ \pi^-$ +1618
- $J/\psi K^+ K^+ K^-$ +1619
- $J/\psi \eta K^+$ +1620
- $J/\psi \phi K^+$ +1621
- $J/\psi \omega K^+$ +1622
- $J/\psi \pi^- \pi^- \pi^+ \pi^+ \pi^+$ +1623
- $J/\psi p^+ \bar{\Lambda}^0$ +1624
- $\psi(2S) K^+$ +1625
- $\psi(2S) K^{*+}$ +1626
- $\psi(2S) K^0 \pi^+$ +1627
- $\psi(2S) K^+ \pi^0$ +1628
- $\psi(2S) K^+ \pi^+ \pi^-$ +1629
- $\psi(2S) K^+ \pi^0 \pi^0$ +1630
- $\psi(2S) K^0 \pi^+ \pi^0$ +1631
- $\psi(2S) K_1^+$ +1632
- $\psi(2S) \pi^+$ +1633
- $\psi(2S) \phi K^+$ +1634
- $\eta_c K^+$ +1635
- $K^{*+} \eta_c$ +1636
- $\eta_c K^0 \pi^+$ +1637
- $\eta_c K^+ \pi^0$ +1638
- $\eta_c K^+ \pi^+ \pi^-$ +1639
- $\eta_c K^+ \pi^0 \pi^0$ +1640
- $\eta_c K^0 \pi^+ \pi^0$ +1641
- $\eta_c(2S) K^+$ +1642
- $K^{*+} \eta_c(2S)$ +1643
- $\eta_c(2S) K^0 \pi^+$ +1644
- $\eta_c(2S) K^+ \pi^0$ +1645
- $\eta_c(2S) K^+ \pi^+ \pi^-$ +1646
- $\eta_c(2S) K^+ \pi^0 \pi^0$ +1647
- $\eta_c(2S) K^0 \pi^+ \pi^0$ +1648
- $\chi_{c0} K^+$ +1649
- $K^{*+} \chi_{c0}$ +1650
- $\chi_{c0} K^0 \pi^+$ +1651
- $\chi_{c0} K^+ \pi^0$ +1652
- $\chi_{c0} K^+ \pi^+ \pi^-$ +1653
- $\chi_{c0} K^+ \pi^0 \pi^0$ +1654
- $\chi_{c0} K^0 \pi^+ \pi^0$ +1655
- $\chi_{c1} K^+$ +1656
- $\chi_{c1} K^{*+}$ +1657
- $\chi_{c1} K^0 \pi^+$ +1658
- $\chi_{c1} K^+ \pi^0$ +1659
- $\chi_{c1} K^+ \pi^+ \pi^-$ +1660
- $\chi_{c1} K^+ \pi^0 \pi^0$ +1661
- $\chi_{c1} K^0 \pi^+ \pi^0$ +1662
- $\chi_{c1} \pi^+$ +1663
- $\chi_{c2} K^+$ +1664
- $\chi_{c2} K^{*+}$ +1665
- $\chi_{c2} K^0 \pi^+$ +1666
- $\chi_{c2} K^+ \pi^0$ +1667

- $\chi_{c2}K^+\pi^+\pi^-$ +1668
- $\chi_{c2}K^+\pi^0\pi^0$ +1669
- $\chi_{c2}K^0\pi^+\pi^0$ +1670
- $\psi(377^0)K^+$ +1671
- $\psi(377^0)K^{*+}$ +1672
- $\psi(377^0)K^0\pi^+$ +1673
- $\psi(377^0)K^+\pi^0$ +1674
- $\psi(377^0)K^+\pi^+\pi^-$ +1675
- $\psi(377^0)K^+\pi^0\pi^0$ +1676
- $\psi(377^0)K^0\pi^+\pi^0$ +1677
- $\psi(377^0)K_1^+$ +1678
- $\psi(416^0)K^+$ +1679
- $h_c K^+$ +1680
- $\bar{D}^0 D_s^+$ +1681
- $\bar{D}^{*0} D_s^+$ +1682
- $D_s^{*+}\bar{D}^0$ +1683
- $D_s^{*+}\bar{D}^{*0}$ +1684
- $\bar{D}'^0_1 D_s^+$ +1685
- $\bar{D}'^0_1 D_s^{*+}$ +1686
- $\bar{D}^0_1 D_s^+$ +1687
- $\bar{D}^0_1 D_s^{*+}$ +1688
- $\bar{D}^{*0}_2 D_s^+$ +1689
- $\bar{D}^{*0}_2 D_s^{*+}$ +1690
- $D_s^+ D^-\pi^+$ +1691
- $D_s^+ \bar{D}^0\pi^0$ +1692

- $D_s^{*+} D^-\pi^+$ +1693
- $D_s^{*+}\bar{D}^0\pi^0$ +1694
- $D_s^+ D^-\pi^+\pi^0$ +1695
- $D_s^+\bar{D}^0\pi^+\pi^-$ +1696
- $D_s^+\bar{D}^0\pi^0\pi^0$ +1697
- $D_s^{*+} D^-\pi^+\pi^0$ +1698
- $D_s^{*+}\bar{D}^0\pi^+\pi^-$ +1699
- $D_s^{*+}\bar{D}^0\pi^0\pi^0$ +1700
- $\bar{D}^0 D^+ K^0$ +1701
- $\bar{D}^0 D^{*+} K^0$ +1702
- $\bar{D}^{*0} D^+ K^0$ +1703
- $\bar{D}^{*0} D^{*+} K^0$ +1704
- $\bar{D}^0 D^0 K^+$ +1705
- $\bar{D}^{*0} D^0 K^+$ +1706
- $\bar{D}^0 D^{*0} K^+$ +1707
- $\bar{D}^{*0} D^{*0} K^+$ +1708
- $D^+ D^- K^+$ +1709
- $D^{*+} D^- K^+$ +1710
- $D^+ D^{*-} K^+$ +1711
- $D^{*+} D^{*-} K^+$ +1712
- $\bar{D}^0 D^+ K^{*0}$ +1713
- $\bar{D}^{*0} D^+ K^{*0}$ +1714
- $\bar{D}^0 D^{*+} K^{*0}$ +1715
- $\bar{D}^{*0} D^{*+} K^{*0}$ +1716
- $\bar{D}^0 D^0 K^{*+}$ +1717

- $\bar{D}^{*0} D^0 K^{*+}$ +1718
- $\bar{D}^0 D^{*0} K^{*+}$ +1719
- $\bar{D}^{*0} D^{*0} K^{*+}$ +1720
- $D^+ D^- K^{*+}$ +1721
- $D^{*+} D^- K^{*+}$ +1722
- $D^+ D^{*-} K^{*+}$ +1723
- $D^{*+} D^{*-} K^{*+}$ +1724
- $D^+\bar{D}^0$ +1725
- $D^{*+}\bar{D}^0$ +1726
- $\bar{D}^{*0} D^+$ +1727
- $\bar{D}^{*0} D^{*+}$ +1728
- $\bar{D}^{*0}\pi^+$ +1729
- $\bar{D}^0\pi^+$ +1730
- $\rho^+\bar{D}^0$ +1731
- $\bar{D}^{*0}\rho^+$ +1732
- $\bar{D}^0\pi^0\pi^+$ +1733
- $\bar{D}^{*0}\pi^0\pi^+$ +1734
- $D^-\pi^+\pi^+$ +1735
- $D^{*-}\pi^+\pi^+$ +1736
- $a_1^+\bar{D}^0$ +1737
- $\bar{D}^0\rho^0\pi^+$ +1738
- $\bar{D}^0\pi^-\pi^+\pi^+$ +1739
- $\bar{D}^{*0}a_1^+$ +1740
- $\bar{D}^{*0}\rho^0\pi^+$ +1741
- $\bar{D}^{*0}\pi^-\pi^+\pi^+$ +1742

- $D^-\rho^+\pi^+$ +1743
- $D^-\pi^0\pi^+\pi^+$ +1744
- $D^{*-}\rho^+\pi^+$ +1745
- $D^{*-}\pi^0\pi^+\pi^+$ +1746
- $\bar{D}^{*0}\rho^+\pi^0$ +1747
- $\bar{D}^{*0}\pi^+\pi^0\pi^0$ +1748
- $\bar{D}_1^0\pi^+$ +1749
- $\bar{D}'^0_1\pi^+$ +1750
- $\bar{D}_2^{*0}\pi^+$ +1751
- $\bar{D}_1^0\rho^+$ +1752
- $\bar{D}'^0_1\rho^+$ +1753
- $\bar{D}_2^{*0}\rho^+$ +1754
- $\bar{D}_0^{*0}\pi^+$ +1755
- $\bar{D}^0 K^+$ +1756
- $\bar{D}^{*0} K^+$ +1757
- $K^{*+}\bar{D}^0$ +1758
- $\bar{D}^{*0} K^{*+}$ +1759
- $D^+\pi^0$ +1760
- $D^{*+}\pi^0$ +1761
- $D^+\bar{K}^0$ +1762
- $D^{*+}\bar{K}^0$ +1763
- $\bar{D}^0 D_{s0}^{*+}$ +1764
- $\bar{D}^{*0} D_{s0}^{*+}$ +1765
- $D_{s1}^+\bar{D}^0$ +1766
- $\bar{D}^{*0} D_{s1}^+$ +1767
- $\bar{D}^0 K^+\bar{K}^0$ +1768
- $\bar{D}^0 K^+\bar{K}^{*0}$ +1769
- $\bar{D}^{*0} K^+\bar{K}^{*0}$ +1770
- $\bar{D}^0\omega\pi^+$ +1771
- $\bar{D}^{*0}\omega\pi^+$ +1772
- $\bar{D}^0 D'^+_{s1}$ +1773
- $\bar{D}^{*0} D'^+_{s1}$ +1774
- $\bar{c}d_1 uu_1$ +1775
- $\bar{c}s_1 uu_1$ +1776
- $u\bar{d}\bar{c}u$ +1777
- $u\bar{d}\bar{c}u$ +1778
- $u\bar{s}\bar{c}u$ +1779
- $c\bar{s}\bar{c}u$ +1780
- $c\bar{d}\bar{c}u$ +1781
- $u\bar{d}\bar{u}u$ +1782
- $c\bar{s}\bar{u}u$ +1783
- $u\bar{u}\bar{d}u$ +1784
- $d\bar{d}\bar{d}u$ +1785
- $s\bar{s}\bar{d}u$ +1786
- $u\bar{u}\bar{s}u$ +1787
- $d\bar{d}\bar{s}u$ +1788
- $s\bar{s}\bar{s}u$ +1789
- $\bar{s}u$ +1790
- $\bar{D}^{*0} K^+ K^{*0}$ +1791
- $\bar{D}^{*0}\pi^-\pi^+\pi^+\pi^0$ +1792
- $\bar{D}^{*0}\pi^+\pi^+\pi^+\pi^-\pi^-$ +1793
- $D^{*-}\pi^+\pi^+\pi^+\pi^-$ +1794
- $D_s^-\pi^+ K^+$ +1795
- $D_s^{*-}\pi^+ K^+$ +1796
- $D_s^- K^+ K^+$ +1797
- ηK_0^{*+} +1798
- ηK_2^{*+} +1799
- ωK_0^{*+} +1800
- ωK_2^{*+} +1801
- $K^{*0}\pi^+$ +1802
- $f_2 K^+$ +1803
- $K_2^{*0}\pi^+$ +1804
- $K^{*+} K^{*0}$ +1805
- ϕK_1^+ +1806
- ϕK_2^{*+} +1807
- $\eta K^+\gamma$ +1808
- $\eta' K^+\gamma$ +1809
- $\phi K^+\gamma$ +1810
- $p^+\bar{p}^-\pi^+$ +1811
- $p^+\bar{p}^- K^+$ +1812
- $p^+\bar{p}^- K^{*+}$ +1813
- $p^+\bar{\Lambda}^0\gamma$ +1814
- $p^+\bar{\Lambda}^0\pi^0$ +1815
- $p^+\bar{\Lambda}^0\pi^+\pi^-$ +1816
- $p^+\bar{\Lambda}^0\rho^0$ +1817

- $p^+\bar{\Lambda}^0 f_2$ +1818
- $\Lambda^0\bar{\Lambda}^0 K^+$ +1819
- $\Lambda^0\bar{\Lambda}^0 K^{*+}$ +1820
- $\bar{\Lambda}_c^- p^+\pi^+$ +1821

- $\bar{\Lambda}_c^- p^+\pi^+\pi^0$ +1822
- $\bar{\Lambda}_c^- p^+\pi^+\pi^+\pi^-$ +1823
- $\bar{\Sigma}_{c0}p^+$ +1824
- $\bar{\Sigma}_{c0}p^+\pi^0$ +1825

- $\bar{\Sigma}_{c0}p^+\pi^-\pi^+$ +1826
- $\bar{\Sigma}_c^{--}p^+\pi^+\pi^+$ +1827

B   List of tag numbers for B^- decays

Tag numbers for the 825 B^- decays are following.

- $D^{*0}e^-\bar{\nu}_e$ −1001
- $D^0 e^-\bar{\nu}_e$ −1002
- $D_1^0 e^-\bar{\nu}_e$ −1003
- $D_0^{*0}e^-\bar{\nu}_e$ −1004
- $D_1'^0 e^-\bar{\nu}_e$ −1005
- $D_2^{*0}e^-\bar{\nu}_e$ −1006
- $D^{*+}\pi^- e^-\bar{\nu}_e$ −1007
- $D^{*0}\pi^0 e^-\bar{\nu}_e$ −1008
- $D^+\pi^- e^-\bar{\nu}_e$ −1009
- $D^0\pi^0 e^-\bar{\nu}_e$ −1010
- $D^0\pi^+\pi^- e^-\bar{\nu}_e$ −1011
- $D^+\pi^-\pi^0 e^-\bar{\nu}_e$ −1012
- $D^0\pi^0\pi^0 e^-\bar{\nu}_e$ −1013
- $D^{*0}\pi^+\pi^- e^-\bar{\nu}_e$ −1014
- $D^{*+}\pi^-\pi^0 e^-\bar{\nu}_e$ −1015
- $D^{*0}\pi^0\pi^0 e^-\bar{\nu}_e$ −1016
- $D_s^{*+}K^- e^-\bar{\nu}_e$ −1017
- $D_s^+ K^- e^-\bar{\nu}_e$ −1018
- $D^0\eta e^-\bar{\nu}_e$ −1019

- $D^{*0}\eta e^-\bar{\nu}_e$ −1020
- $D^{*0}\mu^-\bar{\nu}_\mu$ −1021
- $D^0\mu^-\bar{\nu}_\mu$ −1022
- $D_1^0\mu^-\bar{\nu}_\mu$ −1023
- $D_0^{*0}\mu^-\bar{\nu}_\mu$ −1024
- $D_1'^0\mu^-\bar{\nu}_\mu$ −1025
- $D_2^{*0}\mu^-\bar{\nu}_\mu$ −1026
- $D^{*+}\pi^-\mu^-\bar{\nu}_\mu$ −1027
- $D^{*0}\pi^0\mu^-\bar{\nu}_\mu$ −1028
- $D^+\pi^-\mu^-\bar{\nu}_\mu$ −1029
- $D^0\pi^0\mu^-\bar{\nu}_\mu$ −1030
- $D^0\pi^+\pi^-\mu^-\bar{\nu}_\mu$ −1031
- $D^+\pi^-\pi^0\mu^-\bar{\nu}_\mu$ −1032
- $D^0\pi^0\pi^0\mu^-\bar{\nu}_\mu$ −1033
- $D^{*0}\pi^+\pi^-\mu^-\bar{\nu}_\mu$ −1034
- $D^{*+}\pi^-\pi^0\mu^-\bar{\nu}_\mu$ −1035
- $D^{*0}\pi^0\pi^0\mu^-\bar{\nu}_\mu$ −1036
- $D_s^{*+}K^-\mu^-\bar{\nu}_\mu$ −1037
- $D_s^+ K^-\mu^-\bar{\nu}_\mu$ −1038

- $D^0\eta\mu^-\bar{\nu}_\mu$ −1039
- $D^{*0}\eta\mu^-\bar{\nu}_\mu$ −1040
- $D^{*0}\tau^-\bar{\nu}_\tau$ −1041
- $D^0\tau^-\bar{\nu}_\tau$ −1042
- $D_1^0\tau^-\bar{\nu}_\tau$ −1043
- $D_0^{*0}\tau^-\bar{\nu}_\tau$ −1044
- $D_1'^0\tau^-\bar{\nu}_\tau$ −1045
- $D_2^{*0}\tau^-\bar{\nu}_\tau$ −1046
- $\pi^0 e^-\bar{\nu}_e$ −1047
- $\eta e^-\bar{\nu}_e$ −1048
- $\rho^0 e^-\bar{\nu}_e$ −1049
- $\omega e^-\bar{\nu}_e$ −1050
- $\eta' e^-\bar{\nu}_e$ −1051
- $D(2S)^0 e^-\bar{\nu}_e$ −1052
- $D^*(2S)^0 e^-\bar{\nu}_e$ −1053
- $X u^0 e^-\bar{\nu}_e$ −1054
- $\pi^0\mu^-\bar{\nu}_\mu$ −1055
- $\eta\mu^-\bar{\nu}_\mu$ −1056
- $\rho^0\mu^-\bar{\nu}_\mu$ −1057

- $\omega\mu^-\bar{\nu}_\mu$ -1058
- $\eta'\mu^-\bar{\nu}_\mu$ -1059
- $D(2S)^0\mu^-\bar{\nu}_\mu$ -1060
- $D^*(2S)^0\mu^-\bar{\nu}_\mu$ -1061
- $Xu^0\mu^-\bar{\nu}_\mu$ -1062
- $\pi^0\tau^-\bar{\nu}_\tau$ -1063
- $\eta\tau^-\bar{\nu}_\tau$ -1064
- $\rho^0\tau^-\bar{\nu}_\tau$ -1065
- $\omega\tau^-\bar{\nu}_\tau$ -1066
- $\eta'\tau^-\bar{\nu}_\tau$ -1067
- $a_1^0\tau^-\bar{\nu}_\tau$ -1068
- $b_1^0\tau^-\bar{\nu}_\tau$ -1069
- $a_0^0\tau^-\bar{\nu}_\tau$ -1070
- $f_0\tau^-\bar{\nu}_\tau$ -1071
- $f'_0\tau^-\bar{\nu}_\tau$ -1072
- $f_1\tau^-\bar{\nu}_\tau$ -1073
- $f'_1\tau^-\bar{\nu}_\tau$ -1074
- $h_1\tau^-\bar{\nu}_\tau$ -1075
- $h'_1\tau^-\bar{\nu}_\tau$ -1076
- $f_2\tau^-\bar{\nu}_\tau$ -1077
- $f'_2\tau^-\bar{\nu}_\tau$ -1078
- $D(2S)^0\tau^-\bar{\nu}_\tau$ -1079
- $D^*(2S)^0\tau^-\bar{\nu}_\tau$ -1080
- $D_s^-\pi^0$ -1081
- $D_s^{*-}\pi^0$ -1082

- $\rho^0 D_s^-$ -1083
- $D_s^{*-}\rho^0$ -1084
- $K^{*-}\gamma$ -1085
- $K_1^-\gamma$ -1086
- $K_2^{*-}\gamma$ -1087
- $\rho^-\gamma$ -1088
- $K'^-_1\gamma$ -1089
- $K'^{*-}\gamma$ -1090
- $K''^{*-}\gamma$ -1091
- $\bar{X}su\gamma$ -1092
- $K^-e^+e^-$ -1093
- $\pi^-e^+e^-$ -1094
- $K^{*-}e^+e^-$ -1095
- $\bar{X}sue^+e^-$ -1096
- $K^-\pi^+\pi^-e^+e^-$ -1097
- $K^-\pi^0\pi^0e^+e^-$ -1098
- $K^-\phi e^+e^-$ -1099
- $K^-\mu^+\mu^-$ -1100
- $\pi^-\mu^+\mu^-$ -1101
- $K^{*-}\mu^+\mu^-$ -1102
- $K^-\pi^+\pi^-\mu^+\mu^-$ -1103
- $K^-\pi^0\pi^0\mu^+\mu^-$ -1104
- $K^-\phi\mu^+\mu^-$ -1105
- $\bar{X}su\mu^+\mu^-$ -1106
- $K^-\tau^+\tau^-$ -1107

- $K^{*-}\tau^+\tau^-$ -1108
- $\bar{X}su\tau^+\tau^-$ -1109
- $\tau^-\bar{\nu}_\tau$ -1110
- $\mu^-\bar{\nu}_\mu$ -1111
- $e^-\bar{\nu}_e$ -1112
- $\pi^-\pi^0\pi^0$ -1113
- $\pi^-\pi^-\pi^+$ -1114
- $\eta\pi^-$ -1115
- ηK^- -1116
- $K^{*-}\eta$ -1117
- $\rho^-\eta$ -1118
- $\eta'\pi^-$ -1119
- $\eta'K^-$ -1120
- $K^{*-}\eta'$ -1121
- $\rho^-\eta'$ -1122
- $\omega\pi^-$ -1123
- ωK^- -1124
- ωK^{*-} -1125
- $\omega\rho^-$ -1126
- $\phi\pi^-$ -1127
- ϕK^- -1128
- $\bar{K}^0\pi^-$ -1129
- $K_S^0\pi^-$ -1130
- $K_L^0\pi^-$ -1131
- K^0K^- -1132

- $\pi^-\pi^0$ -1133
- $K^-\pi^0$ -1134
- $\rho^0\pi^-$ -1135
- $\rho^0 K^-$ -1136
- $\rho^-\bar{K}^0$ -1137
- $\rho^-\pi^0$ -1138
- $\rho(2S)^0\pi^-$ -1139
- $\rho(2S)^0 K^-$ -1140
- $f_0\pi^-$ -1141
- $f_0 K^-$ -1142
- $a_0^-\bar{K}^0$ -1143
- $a_0^0 K^-$ -1144
- $a_0^0\pi^-$ -1145
- $a_0^-\pi^0$ -1146
- $f_2\pi^-$ -1147
- $\bar{K}_0^{*0}\pi^-$ -1148
- $K_0^{*0}K^-$ -1149
- $K_0^{*-}\pi^0$ -1150
- $K_0^{*-}K^0$ -1151
- $K^{*-}\pi^0$ -1152
- $K^{*-}K^0$ -1153
- $K^-\pi^+\pi^-$ -1154
- $K^-K^+\pi^-$ -1155
- $K^-K^+K^-$ -1156
- $K^-K^-\pi^+$ -1157

- $K^+\pi^-\pi^-$ -1158
- $K^-K^0\pi^0$ -1159
- $K^-K^0\eta$ -1160
- $K^-K^0\eta'$ -1161
- $\pi^-\bar{K}^0\pi^0$ -1162
- $\pi^-\bar{K}^0\eta$ -1163
- $\pi^-\bar{K}^0\eta'$ -1164
- $\pi^-\pi^0\eta$ -1165
- $\pi^-\pi^0\eta'$ -1166
- $\pi^-\eta\eta$ -1167
- $\pi^-\eta\eta'$ -1168
- $K^-\pi^0\pi^0$ -1169
- $K^-\pi^0\eta$ -1170
- $K^-\pi^0\eta'$ -1171
- $K^-\eta\eta$ -1172
- $K^-\eta\eta'$ -1173
- $K^-\eta'\eta'$ -1174
- $K^-\bar{K}^0K^0$ -1175
- $\pi^-\bar{K}^0K^0$ -1176
- $\rho^-\rho^0$ -1177
- $\rho^0\pi^-\pi^0$ -1178
- $\rho^0\pi^-\eta$ -1179
- $\rho^0\pi^-\eta'$ -1180
- $\omega\pi^-\pi^0$ -1181
- $\omega\pi^-\eta$ -1182

- $\omega\pi^-\eta'$ -1183
- $\rho^-\pi^-\pi^+$ -1184
- $\rho^+\pi^-\pi^-$ -1185
- $\rho^-\pi^0\pi^0$ -1186
- $\rho^-\pi^0\eta$ -1187
- $\rho^-\eta\eta$ -1188
- $\rho^-\pi^0\eta'$ -1189
- $\pi^+\pi^-\pi^-\pi^0$ -1190
- $\pi^+\pi^-\pi^-\eta$ -1191
- $\pi^+\pi^-\pi^-\eta'$ -1192
- $\pi^-\pi^0\pi^0\pi^0$ -1193
- $\pi^-\eta\pi^0\pi^0$ -1194
- $\pi^-\eta\eta\pi^0$ -1195
- $\pi^-\eta'\pi^0\pi^0$ -1196
- $\pi^-\eta'\eta\pi^0$ -1197
- $a_1^0\pi^-$ -1198
- $a_1^-\pi^0$ -1199
- $b_1^0\pi^-$ -1200
- $b_1^-\pi^0$ -1201
- ρ^-f_0 -1202
- $\rho^-a_0^0$ -1203
- $\rho^0a_0^-$ -1204
- $f_0\pi^-\pi^0$ -1205
- $a_0^0\pi^-\pi^0$ -1206
- $a_0^-\pi^0\pi^0$ -1207

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- $a_0^+ \pi^- \pi^-$ $\qquad$ -1208
- $\rho^- \bar{K}^{*0}$ $\qquad$ -1209
- $\rho^0 K^{*-}$ $\qquad$ -1210
- $\pi^- \pi^0 \bar{K}^{*0}$ $\qquad$ -1211
- $\pi^- \eta \bar{K}^{*0}$ $\qquad$ -1212
- $\pi^+ \pi^- K^{*-}$ $\qquad$ -1213
- $\pi^0 \pi^0 K^{*-}$ $\qquad$ -1214
- $\pi^0 \eta K^{*-}$ $\qquad$ -1215
- $\eta \eta K^{*-}$ $\qquad$ -1216
- $\pi^0 \eta' K^{*-}$ $\qquad$ -1217
- $\eta \eta' K^{*-}$ $\qquad$ -1218
- $\rho^- \bar{K}^0 \pi^0$ $\qquad$ -1219
- $\rho^- \bar{K}^0 \eta$ $\qquad$ -1220
- $\rho^- \bar{K}^0 \eta'$ $\qquad$ -1221
- $\rho^- K^- \pi^+$ $\qquad$ -1222
- $\rho^+ K^- \pi^-$ $\qquad$ -1223
- $\rho^0 \bar{K}^0 \pi^-$ $\qquad$ -1224
- $\rho^0 K^- \pi^0$ $\qquad$ -1225
- $\rho^0 K^- \eta$ $\qquad$ -1226
- $\rho^0 K^- \eta'$ $\qquad$ -1227
- $\omega \bar{K}^0 \pi^-$ $\qquad$ -1228
- $\omega K^- \pi^0$ $\qquad$ -1229
- $\omega K^- \eta$ $\qquad$ -1230
- $\omega K^- \eta'$ $\qquad$ -1231
- $\pi^+ \pi^- \pi^- \bar{K}^0$ $\qquad$ -1232

- $\pi^- \pi^0 \pi^0 \bar{K}^0$ $\qquad$ -1233
- $\pi^- \eta \pi^0 \bar{K}^0$ $\qquad$ -1234
- $\pi^- \eta \eta \bar{K}^0$ $\qquad$ -1235
- $\pi^+ \pi^- \pi^0 K^-$ $\qquad$ -1236
- $\pi^+ \pi^- \eta K^-$ $\qquad$ -1237
- $\pi^0 \pi^0 \pi^0 K^-$ $\qquad$ -1238
- $\pi^0 \pi^0 \eta K^-$ $\qquad$ -1239
- $\pi^0 \eta \eta K^-$ $\qquad$ -1240
- $\pi^0 \pi^0 \eta' K^-$ $\qquad$ -1241
- $\pi^0 \eta \eta' K^-$ $\qquad$ -1242
- $\rho^- \bar{K}_0^{*0}$ $\qquad$ -1243
- $\rho^0 K_0^{*-}$ $\qquad$ -1244
- $\pi^- \pi^0 \bar{K}_0^{*0}$ $\qquad$ -1245
- $\pi^0 \pi^0 K_0^{*-}$ $\qquad$ -1246
- $K^{*-} f_0$ $\qquad$ -1247
- $a_1^0 K^-$ $\qquad$ -1248
- $a_1^- \bar{K}^0$ $\qquad$ -1249
- $b_1^0 K^-$ $\qquad$ -1250
- $b_1^- \bar{K}^0$ $\qquad$ -1251
- $K^{*-} a_0^0$ $\qquad$ -1252
- $\bar{K}^{*0} a_0^-$ $\qquad$ -1253
- $K^{*0} K^{*-}$ $\qquad$ -1254
- $\phi \rho^-$ $\qquad$ -1255
- $\phi \pi^- \pi^0$ $\qquad$ -1256
- $\phi \pi^- \eta$ $\qquad$ -1257

- $\phi \pi^- \eta'$ $\qquad$ -1258
- $K^+ K^- \rho^-$ $\qquad$ -1259
- $K^0 \bar{K}^0 \rho^-$ $\qquad$ -1260
- $K^0 K^- \rho^0$ $\qquad$ -1261
- $K^0 K^- \omega$ $\qquad$ -1262
- $K^+ K^- \pi^- \pi^0$ $\qquad$ -1263
- $K^+ K^- \pi^- \eta$ $\qquad$ -1264
- $K^+ K^- \pi^- \eta'$ $\qquad$ -1265
- $K^0 \bar{K}^0 \pi^- \pi^0$ $\qquad$ -1266
- $K^0 \bar{K}^0 \pi^- \eta$ $\qquad$ -1267
- $K^0 \bar{K}^0 \pi^- \eta'$ $\qquad$ -1268
- $K^0 K^- \pi^+ \pi^-$ $\qquad$ -1269
- $K^0 K^- \pi^0 \pi^0$ $\qquad$ -1270
- $K^0 K^- \pi^0 \eta$ $\qquad$ -1271
- $K^0 K^- \eta \eta$ $\qquad$ -1272
- $K^0 K^- \pi^0 \eta'$ $\qquad$ -1273
- $K^0 K^- \eta \eta'$ $\qquad$ -1274
- $K^{*+} K^- \pi^-$ $\qquad$ -1275
- $K^{*-} K^+ \pi^-$ $\qquad$ -1276
- $K^{*0} \bar{K}^0 \pi^-$ $\qquad$ -1277
- $K^0 \bar{K}^{*0} \pi^-$ $\qquad$ -1278
- $K^- K^{*0} \pi^0$ $\qquad$ -1279
- $K^- K^{*0} \eta$ $\qquad$ -1280
- $K^- K^{*0} \eta'$ $\qquad$ -1281
- $K^{*-} K^0 \pi^0$ $\qquad$ -1282

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- $K^{*-}K^0\eta$ -1283
- $K^{*-}K^0\eta'$ -1284
- ϕK^{*-} -1285
- $\phi \bar{K}^0\pi^-$ -1286
- $\phi K^-\pi^0$ -1287
- $\phi K^-\eta$ -1288
- $\phi K^-\eta'$ -1289
- $K^-K^+K^{*-}$ -1290
- $K^-K^{*+}K^-$ -1291
- $K^-K^{*0}\bar{K}^0$ -1292
- $K^-K^0\bar{K}^{*0}$ -1293
- $K^0K^{*-}\bar{K}^0$ -1294
- $K^+K^-K^-\pi^0$ -1295
- $K^+K^-K^-\eta$ -1296
- $K^+K^-K^-\eta'$ -1297
- $K^+K^-\bar{K}^0\pi^-$ -1298
- $K^0\bar{K}^0K^-\pi^0$ -1299
- $K^0\bar{K}^0K^-\eta$ -1300
- $K^0\bar{K}^0K^-\eta'$ -1301
- $K^0\bar{K}^0\bar{K}^0\pi^-$ -1302
- ϕK_0^{*-} -1303
- $K^-K^+K_0^{*-}$ -1304
- $K^-K^-K_0^{*+}$ -1305
- $K^-\bar{K}_0^{*0}K^0$ -1306
- $K^-K_0^{*0}\bar{K}^0$ -1307

- $\phi K_1'^-$ -1308
- $K^-K^+K_1'^-$ -1309
- ϕK^0K^- -1310
- $K^+K^-K^-K^0$ -1311
- $K^0\bar{K}^0K^0K^-$ -1312
- $\rho^0\rho^0\pi^-$ -1313
- $\rho^-\rho^0\pi^0$ -1314
- $\rho^-\rho^0\eta$ -1315
- $\rho^-\rho^0\eta'$ -1316
- $\rho^+\rho^-\pi^-$ -1317
- $\omega\rho^0\pi^-$ -1318
- $\omega\rho^-\pi^0$ -1319
- $\omega\rho^-\eta$ -1320
- $\omega\rho^-\eta'$ -1321
- $\rho^0\pi^+\pi^-\pi^-$ -1322
- $\rho^0\pi^-\pi^0\pi^0$ -1323
- $\rho^0\pi^-\eta\pi^0$ -1324
- $\rho^0\pi^-\eta'\pi^0$ -1325
- $\omega\pi^-\pi^0\pi^0$ -1326
- $\omega\pi^-\eta\pi^0$ -1327
- $\omega\pi^-\eta'\pi^0$ -1328
- $\rho^+\pi^-\pi^-\pi^0$ -1329
- $\rho^+\pi^-\pi^-\eta$ -1330
- $\rho^+\pi^-\pi^-\eta'$ -1331
- $\rho^-\pi^+\pi^-\pi^0$ -1332

- $\rho^-\pi^+\pi^-\eta$ -1333
- $\rho^-\pi^+\pi^-\eta'$ -1334
- $\rho^-\pi^0\pi^0\pi^0$ -1335
- $\rho^-\pi^0\eta\pi^0$ -1336
- $\rho^-\eta\eta\pi^0$ -1337
- $\rho^-\pi^0\eta'\pi^0$ -1338
- $\pi^+\pi^-\pi^-\pi^0\pi^0$ -1339
- $\pi^+\pi^-\pi^-\eta\pi^0$ -1340
- $\pi^+\pi^-\pi^-\eta'\pi^0$ -1341
- $\pi^-\pi^0\pi^0\pi^0\pi^0$ -1342
- $\pi^-\eta\pi^0\pi^0\pi^0$ -1343
- $\pi^-\eta'\pi^0\pi^0\pi^0$ -1344
- $a_1^-\rho^0$ -1345
- $a_1^-\omega$ -1346
- $a_1^-f_0$ -1347
- $a_1^0\pi^-\pi^0$ -1348
- $a_1^0\pi^-\eta$ -1349
- $a_1^0\pi^-\eta'$ -1350
- $a_1^+\pi^-\pi^-$ -1351
- $a_1^-\pi^+\pi^-$ -1352
- $a_1^-\pi^0\pi^0$ -1353
- $a_1^-\pi^0\eta$ -1354
- $a_1^-\pi^0\eta'$ -1355
- $\rho^-f_0\pi^0$ -1356
- $\rho^-f_0\eta$ -1357

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- $\rho^- f_0 \eta'$ -1358
- $\rho^0 f_0 \pi^-$ -1359
- $\omega f_0 \pi^-$ -1360
- $\rho^- a_0^0 \pi^0$ -1361
- $\rho^- a_0^0 \eta$ -1362
- $\rho^- a_0^0 \eta'$ -1363
- $\rho^+ a_0^- \pi^-$ -1364
- $\rho^0 a_0^- \pi^0$ -1365
- $\rho^0 a_0^- \eta$ -1366
- $\rho^0 a_0^- \eta'$ -1367
- $f_0 \pi^+ \pi^- \pi^-$ -1368
- $f_0 \pi^- \pi^0 \pi^0$ -1369
- $f_0 \pi^- \pi^0 \eta$ -1370
- $f_0 \pi^- \pi^0 \eta'$ -1371
- $a_0^0 \pi^- \pi^0 \pi^0$ -1372
- $a_0^- \pi^0 \pi^0 \pi^0$ -1373
- $a_0^+ \pi^- \pi^- \pi^0$ -1374
- $\rho^- K^{*-} \pi^+$ -1375
- $\rho^+ K^{*-} \pi^-$ -1376
- $\rho^- \bar{K}^{*0} \pi^0$ -1377
- $\rho^- \bar{K}^{*0} \eta$ -1378
- $\rho^- \bar{K}^{*0} \eta'$ -1379
- $\rho^0 \bar{K}^{*0} \pi^-$ -1380
- $\rho^0 K^{*-} \pi^0$ -1381
- $\rho^0 K^{*-} \eta$ -1382

- $\rho^0 K^{*-} \eta'$ -1383
- $\omega \bar{K}^{*0} \pi^-$ -1384
- $\omega K^{*-} \pi^0$ -1385
- $\omega K^{*-} \eta$ -1386
- $\omega K^{*-} \eta'$ -1387
- $\pi^+ \pi^- \bar{K}^{*0} \pi^-$ -1388
- $\pi^- \pi^0 \bar{K}^{*0} \pi^0$ -1389
- $\pi^- \eta \bar{K}^{*0} \pi^0$ -1390
- $\pi^- \eta' \bar{K}^{*0} \pi^0$ -1391
- $\pi^- \pi^+ K^{*-} \pi^0$ -1392
- $\pi^- \pi^+ K^{*-} \eta$ -1393
- $\pi^- \pi^+ K^{*-} \eta'$ -1394
- $\pi^0 \pi^0 K^{*-} \pi^0$ -1395
- $\pi^0 \eta K^{*-} \pi^0$ -1396
- $\eta \eta K^{*-} \pi^0$ -1397
- $\pi^0 \eta' K^{*-} \pi^0$ -1398
- $\eta \eta' K^{*-} \pi^0$ -1399
- $\rho^- \bar{K}^0 \pi^+ \pi^-$ -1400
- $\rho^- \bar{K}^0 \pi^0 \pi^0$ -1401
- $\rho^- \bar{K}^0 \eta \pi^0$ -1402
- $\rho^- \bar{K}^0 \eta' \pi^0$ -1403
- $\rho^- K^- \pi^+ \pi^0$ -1404
- $\rho^+ K^- \pi^- \pi^0$ -1405
- $\rho^+ \bar{K}^0 \pi^- \pi^-$ -1406
- $\rho^0 \bar{K}^0 \pi^- \pi^0$ -1407

- $\rho^0 K^- \pi^0 \pi^0$ -1408
- $\rho^0 K^- \eta \pi^0$ -1409
- $\rho^0 K^- \eta' \pi^0$ -1410
- $\omega \bar{K}^0 \pi^- \pi^0$ -1411
- $\omega K^- \pi^0 \pi^0$ -1412
- $\omega K^- \eta \pi^0$ -1413
- $\omega K^- \eta' \pi^0$ -1414
- $\pi^- \pi^- \pi^+ \bar{K}^0 \pi^0$ -1415
- $\pi^- \pi^- \pi^+ \bar{K}^0 \eta$ -1416
- $\pi^- \pi^- \pi^+ \bar{K}^0 \eta'$ -1417
- $\pi^- \pi^0 \pi^0 \bar{K}^0 \pi^0$ -1418
- $\pi^- \eta \pi^0 \bar{K}^0 \pi^0$ -1419
- $\pi^- \eta \eta \bar{K}^0 \pi^0$ -1420
- $\pi^+ \pi^- \pi^+ K^- \pi^-$ -1421
- $\pi^+ \pi^- \pi^0 K^- \pi^0$ -1422
- $\pi^+ \pi^- \eta K^- \pi^0$ -1423
- $\pi^+ \pi^- \eta' K^- \pi^0$ -1424
- $\pi^0 \pi^0 \pi^0 K^- \pi^0$ -1425
- $\pi^0 \pi^0 \eta K^- \pi^0$ -1426
- $\pi^0 \eta \eta K^- \pi^0$ -1427
- $\pi^0 \pi^0 \eta' K^- \pi^0$ -1428
- $\pi^0 \eta \eta' K^- \pi^0$ -1429
- $\rho^0 \bar{K}_0^{*0} \pi^-$ -1430
- $\rho^- \bar{K}_0^{*0} \pi^0$ -1431
- $\rho^- \bar{K}_0^{*0} \eta$ -1432

- $\rho^- \bar{K}_0^{*0} \eta'$ -1433
- $\rho^- K_0^{*-} \pi^+$ -1434
- $\rho^0 K_0^{*-} \pi^0$ -1435
- $\rho^0 K_0^{*-} \eta$ -1436
- $\rho^0 K_0^{*-} \eta'$ -1437
- $\pi^- \pi^- \bar{K}_0^{*0} \pi^+$ -1438
- $\pi^- \pi^0 \bar{K}_0^{*0} \pi^0$ -1439
- $\pi^- \pi^0 \bar{K}_0^{*0} \eta$ -1440
- $\pi^- \pi^0 \bar{K}_0^{*0} \eta'$ -1441
- $\pi^0 \pi^0 K_0^{*-} \pi^0$ -1442
- $\pi^0 \pi^0 K_0^{*-} \eta$ -1443
- $\pi^0 \pi^0 K_0^{*-} \eta'$ -1444
- $\bar{K}^{*0} f_0 \pi^-$ -1445
- $K^{*-} f_0 \pi^0$ -1446
- $K^{*-} f_0 \eta$ -1447
- $K^{*-} f_0 \eta'$ -1448
- $a_1^0 K^{*-}$ -1449
- $a_1^0 K^- \pi^0$ -1450
- $a_1^0 \bar{K}^0 \pi^-$ -1451
- $a_1^- \bar{K}^{*0}$ -1452
- $a_1^- K^- \pi^+$ -1453
- $a_1^- \bar{K}^0 \pi^0$ -1454
- $K^{*-} a_0^0 \pi^0$ -1455
- $\bar{K}^{*0} a_0^- \pi^0$ -1456
- $K^{*0} \bar{K}^{*0} \pi^-$ -1457

- $K^{*0} K^{*-} \pi^0$ -1458
- $K^{*0} K^{*-} \eta$ -1459
- $K^{*0} K^{*-} \eta'$ -1460
- $\phi \rho^0 \pi^-$ -1461
- $\phi \omega \pi^-$ -1462
- $\phi f_0 \pi^-$ -1463
- $\phi \rho^- \pi^0$ -1464
- $\phi \rho^- \eta$ -1465
- $\phi \rho^- \eta'$ -1466
- $\phi \pi^+ \pi^- \pi^-$ -1467
- $\phi \pi^- \pi^0 \pi^0$ -1468
- $\phi \pi^- \eta \pi^0$ -1469
- $\phi \pi^- \eta' \pi^0$ -1470
- $K^0 K^- \rho^+ \pi^-$ -1471
- $K^0 K^- \rho^- \pi^+$ -1472
- $K^0 K^- \rho^0 \pi^0$ -1473
- $K^0 K^- \rho^0 \eta$ -1474
- $K^0 K^- \rho^0 \eta'$ -1475
- $K^0 K^- \omega \pi^0$ -1476
- $K^0 K^- f_0 \pi^0$ -1477
- $K^+ K^- \rho^0 \pi^-$ -1478
- $K^+ K^- \rho^- \pi^0$ -1479
- $K^+ K^- \rho^- \eta$ -1480
- $K^+ K^- \rho^- \eta'$ -1481
- $K^+ K^- \omega \pi^-$ -1482

- $K^0 \bar{K}^0 \rho^0 \pi^-$ -1483
- $K^0 \bar{K}^0 \omega \pi^-$ -1484
- $K^0 \bar{K}^0 f_0 \pi^-$ -1485
- $K^0 \bar{K}^0 \rho^- \pi^0$ -1486
- $K^0 \bar{K}^0 \rho^- \eta$ -1487
- $K^0 \bar{K}^0 \rho^- \eta'$ -1488
- $\bar{K}^0 K^+ \rho^- \pi^-$ -1489
- $\bar{K}^0 K^+ \pi^- \pi^- \pi^0$ -1490
- $\bar{K}^0 K^+ \pi^- \pi^- \eta$ -1491
- $\bar{K}^0 K^+ \pi^- \pi^- \eta'$ -1492
- $K^+ K^- \pi^+ \pi^- \pi^-$ -1493
- $K^+ K^- \pi^- \pi^0 \pi^0$ -1494
- $K^+ K^- \pi^- \eta \pi^0$ -1495
- $K^+ K^- \pi^- \eta' \pi^0$ -1496
- $K^0 \bar{K}^0 \pi^+ \pi^- \pi^-$ -1497
- $K^0 \bar{K}^0 \pi^- \pi^0 \pi^0$ -1498
- $K^0 \bar{K}^0 \pi^- \eta \pi^0$ -1499
- $K^0 \bar{K}^0 \pi^- \eta' \pi^0$ -1500
- $K^0 K^- \pi^+ \pi^- \pi^0$ -1501
- $K^0 K^- \pi^+ \pi^- \eta$ -1502
- $K^0 K^- \pi^+ \pi^- \eta'$ -1503
- $K^0 K^- \pi^0 \pi^0 \pi^0$ -1504
- $K^0 K^- \pi^0 \eta \pi^0$ -1505
- $K^0 K^- \pi^0 \eta' \pi^0$ -1506
- $\bar{K}^{*0} K^+ \pi^- \pi^-$ -1507

- $K^{*+}\bar{K}^0\pi^-\pi^-$ -1508
- $K^{*-}K^+\pi^-\pi^0$ -1509
- $K^{*+}K^-\pi^-\pi^0$ -1510
- $K^{*0}\bar{K}^0\pi^-\pi^0$ -1511
- $K^0\bar{K}^{*0}\pi^-\pi^0$ -1512
- $K^-K^{*0}\pi^0\pi^0$ -1513
- $K^-K^{*0}\eta\pi^0$ -1514
- $K^-K^{*0}\eta'\pi^0$ -1515
- $K^{*-}K^0\pi^0\pi^0$ -1516
- $K^{*-}K^0\eta\pi^0$ -1517
- $K^{*-}K^0\eta'\pi^0$ -1518
- $\phi K^{*-}\pi^0$ -1519
- $\phi K^-\rho^0$ -1520
- $\phi K^-\omega$ -1521
- ϕK^-f_0 -1522
- $\phi \bar{K}^0\rho^-$ -1523
- $\phi \bar{K}^0\pi^-\pi^0$ -1524
- $\phi K^-\pi^+\pi^-$ -1525
- $\phi K^-\pi^0\pi^0$ -1526
- $\phi K^-\eta\pi^0$ -1527
- $\phi K^-\eta'\pi^0$ -1528
- $K^+K^-K^{*-}\pi^0$ -1529
- $K^-K^{*+}K^-\pi^0$ -1530
- $K^-K^{*0}\bar{K}^0\pi^0$ -1531
- $K^-K^0\bar{K}^{*0}\pi^0$ -1532

- $K^0K^{*-}\bar{K}^0\pi^0$ -1533
- $K^+K^-K^-\rho^0$ -1534
- $K^+K^-K^-\omega$ -1535
- $K^+K^-K^-f_0$ -1536
- $K^-K^+\bar{K}^0\rho^-$ -1537
- $K^-K^-K^+\pi^0\pi^0$ -1538
- $K^-K^-K^+\eta\pi^0$ -1539
- $K^-K^-K^+\eta'\pi^0$ -1540
- $K^+K^-\bar{K}^0\pi^-\pi^0$ -1541
- $K^0\bar{K}^0K^-\pi^0\pi^0$ -1542
- $K^0\bar{K}^0K^-\eta\pi^0$ -1543
- $K^0\bar{K}^0K^-\eta'\pi^0$ -1544
- $K^0\bar{K}^0\bar{K}^0\pi^-\pi^0$ -1545
- $\phi \bar{K}_0^{*0}\pi^-$ -1546
- $\phi K_0^{*-}\pi^0$ -1547
- $\phi K_0^{*-}\eta$ -1548
- $\phi K_0^{*-}\eta'$ -1549
- $K^-K^+K_0^{*-}\pi^0$ -1550
- $K^-K^+K_0^{*-}\eta$ -1551
- $K^-K^+K_0^{*-}\eta'$ -1552
- $K^-K^-K_0^{*+}\pi^0$ -1553
- $K^-K^-K_0^{*+}\eta$ -1554
- $K^-K^-K_0^{*+}\eta'$ -1555
- $K^-K^+\bar{K}_0^{*0}\pi^-$ -1556
- $K^-K^-K_0^{*0}\pi^+$ -1557

- $\bar{K}^0\bar{K}^0K_0^{*0}\pi^-$ -1558
- $K^-\bar{K}_0^{*0}K^0\pi^0$ -1559
- $K^-\bar{K}_0^{*0}K^0\eta$ -1560
- $K^-\bar{K}_0^{*0}K^0\eta'$ -1561
- $K^-K_0^{*0}\bar{K}^0\pi^0$ -1562
- $K^-K_0^{*0}\bar{K}^0\eta$ -1563
- $K^-K_0^{*0}\bar{K}^0\eta'$ -1564
- $\phi \bar{K}_1'^0\pi^-$ -1565
- $\phi K_1'^-\pi^0$ -1566
- $\phi K_1'^-\eta$ -1567
- $\phi K_1'^-\eta'$ -1568
- $K^-K^+\bar{K}_1'^0\pi^-$ -1569
- $K^-K^+K_1'^-\pi^0$ -1570
- $K^-K^+K_1'^-\eta$ -1571
- $K^-K^+K_1'^-\eta'$ -1572
- $K^-K^-K_1'^+\pi^0$ -1573
- $K^-K^-\bar{K}_1'^0\pi^+$ -1574
- $K^0\bar{K}^0\bar{K}_1'^0\pi^-$ -1575
- $K^0\bar{K}^0K_1'^-\pi^0$ -1576
- $K^0\bar{K}^0K_1'^-\eta$ -1577
- $K^0\bar{K}^0K_1'^-\eta'$ -1578
- $\bar{K}^0\bar{K}^0K_1'^0\pi^-$ -1579
- $K^0K^0K_1'^-\pi^0$ -1580
- $K^0K^0K_1'^-\eta$ -1581
- $K^0K^0K_1'^-\eta'$ -1582

- $K^- K^0 \bar{K}'^0_1 \pi^0$ -1583
- $K^- K^0 \bar{K}'^0_1 \eta$ -1584
- $K^- K^0 \bar{K}'^0_1 \eta'$ -1585
- $K^- K'^0_1 \bar{K}^0 \pi^0$ -1586
- $K^- K'^0_1 \bar{K}^0 \eta$ -1587
- $K^- K'^0_1 \bar{K}^0 \eta'$ -1588
- $\phi\phi K^-$ -1589
- $\phi\phi\pi^-$ -1590
- $\phi K^+ K^- K^-$ -1591
- $\phi K^0 \bar{K}^0 K^-$ -1592
- $\phi K^0 \bar{K}^0 \pi^-$ -1593
- $\phi K^0 K^- \pi^0$ -1594
- $K^+ K^- K^+ K^- \pi^-$ -1595
- $K^+ K^- K^0 \bar{K}^0 \pi^-$ -1596
- $K^+ K^- K^- K^0 \pi^0$ -1597
- $K^0 \bar{K}^0 K^0 K^- \pi^0$ -1598
- $\phi\phi K^{*-}$ -1599
- $\phi K^+ K^- K^{*-}$ -1600
- $\phi K^0 \bar{K}^0 K^{*-}$ -1601
- $\phi K^0 K^- K^{*0}$ -1602
- $\phi K^+ K^- K^- \pi^0$ -1603
- $\phi K^+ K^- \bar{K}^0 \pi^-$ -1604
- $\phi K^0 \bar{K}^0 K^- \pi^0$ -1605
- $\phi K^0 \bar{K}^0 \bar{K}^0 \pi^-$ -1606
- $\phi K^0 K^- K^- \pi^+$ -1607

- $a_1^- a_1^0$ -1608
- $J/\psi K^-$ -1609
- $J/\psi K^{*-}$ -1610
- $J/\psi \pi^-$ -1611
- $J/\psi \rho^-$ -1612
- $J/\psi \bar{K}^0 \pi^-$ -1613
- $J/\psi K^- \pi^0$ -1614
- $J/\psi K'^-_1$ -1615
- $J/\psi K^{*-}_2$ -1616
- $J/\psi K^-_1$ -1617
- $J/\psi K^- \pi^+ \pi^-$ -1618
- $J/\psi K^- K^+ K^-$ -1619
- $J/\psi \eta K^-$ -1620
- $J/\psi \phi K^-$ -1621
- $J/\psi \omega K^-$ -1622
- $J/\psi \pi^- \pi^- \pi^- \pi^+ \pi^+$ -1623
- $J/\psi \bar{p}^- \Lambda^0$ -1624
- $\psi(2S) K^-$ -1625
- $\psi(2S) K^{*-}$ -1626
- $\psi(2S) \bar{K}^0 \pi^-$ -1627
- $\psi(2S) K^- \pi^0$ -1628
- $\psi(2S) K^- \pi^+ \pi^-$ -1629
- $\psi(2S) K^- \pi^0 \pi^0$ -1630
- $\psi(2S) \bar{K}^0 \pi^- \pi^0$ -1631
- $\psi(2S) K^-_1$ -1632

- $\psi(2S) \pi^-$ -1633
- $\psi(2S) \phi K^-$ -1634
- $\eta_c K^-$ -1635
- $K^{*-} \eta_c$ -1636
- $\eta_c \bar{K}^0 \pi^-$ -1637
- $\eta_c K^- \pi^0$ -1638
- $\eta_c K^- \pi^+ \pi^-$ -1639
- $\eta_c K^- \pi^0 \pi^0$ -1640
- $\eta_c \bar{K}^0 \pi^- \pi^0$ -1641
- $\eta_c(2S) K^-$ -1642
- $K^{*-} \eta_c(2S)$ -1643
- $\eta_c(2S) \bar{K}^0 \pi^-$ -1644
- $\eta_c(2S) K^- \pi^0$ -1645
- $\eta_c(2S) K^- \pi^+ \pi^-$ -1646
- $\eta_c(2S) K^- \pi^0 \pi^0$ -1647
- $\eta_c(2S) \bar{K}^0 \pi^- \pi^0$ -1648
- $\chi_{c0} K^-$ -1649
- $K^{*-} \chi_{c0}$ -1650
- $\chi_{c0} \bar{K}^0 \pi^-$ -1651
- $\chi_{c0} K^- \pi^0$ -1652
- $\chi_{c0} K^- \pi^+ \pi^-$ -1653
- $\chi_{c0} K^- \pi^0 \pi^0$ -1654
- $\chi_{c0} \bar{K}^0 \pi^- \pi^0$ -1655
- $\chi_{c1} K^-$ -1656
- $\chi_{c1} K^{*-}$ -1657

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- $\chi_{c1}\bar{K}^0\pi^-$ -1658
- $\chi_{c1}K^-\pi^0$ -1659
- $\chi_{c1}K^-\pi^+\pi^-$ -1660
- $\chi_{c1}K^-\pi^0\pi^0$ -1661
- $\chi_{c1}\bar{K}^0\pi^-\pi^0$ -1662
- $\chi_{c1}\pi^-$ -1663
- $\chi_{c2}K^-$ -1664
- $\chi_{c2}K^{*-}$ -1665
- $\chi_{c2}\bar{K}^0\pi^-$ -1666
- $\chi_{c2}K^-\pi^0$ -1667
- $\chi_{c2}K^-\pi^+\pi^-$ -1668
- $\chi_{c2}K^-\pi^0\pi^0$ -1669
- $\chi_{c2}\bar{K}^0\pi^-\pi^0$ -1670
- $\psi(377^0)K^-$ -1671
- $\psi(377^0)K^{*-}$ -1672
- $\psi(377^0)\bar{K}^0\pi^-$ -1673
- $\psi(377^0)K^-\pi^0$ -1674
- $\psi(377^0)K^-\pi^+\pi^-$ -1675
- $\psi(377^0)K^-\pi^0\pi^0$ -1676
- $\psi(377^0)\bar{K}^0\pi^-\pi^0$ -1677
- $\psi(377^0)K_1^-$ -1678
- $\psi(416^0)K^-$ -1679
- h_cK^- -1680
- $D^0D_s^-$ -1681
- $D^{*0}D_s^-$ -1682

- $D_s^{*-}D^0$ -1683
- $D_s^{*-}D^{*0}$ -1684
- $D_1'^0D_s^-$ -1685
- $D_1'^0D_s^{*-}$ -1686
- $D_1^0D_s^-$ -1687
- $D_1^0D_s^{*-}$ -1688
- $D_2^{*0}D_s^-$ -1689
- $D_2^{*0}D_s^{*-}$ -1690
- $D_s^-D^+\pi^-$ -1691
- $D_s^-D^0\pi^0$ -1692
- $D_s^{*-}D^+\pi^-$ -1693
- $D_s^{*-}D^0\pi^0$ -1694
- $D_s^-D^+\pi^-\pi^0$ -1695
- $D_s^-D^0\pi^-\pi^+$ -1696
- $D_s^-D^0\pi^0\pi^0$ -1697
- $D_s^{*-}D^+\pi^-\pi^0$ -1698
- $D_s^{*-}D^0\pi^-\pi^+$ -1699
- $D_s^{*-}D^0\pi^0\pi^0$ -1700
- $D^0D^-\bar{K}^0$ -1701
- $D^0D^{*-}\bar{K}^0$ -1702
- $D^{*0}D^-\bar{K}^0$ -1703
- $D^{*0}D^{*-}\bar{K}^0$ -1704
- $D^0\bar{D}^0K^-$ -1705
- $D^{*0}\bar{D}^0K^-$ -1706
- $D^0\bar{D}^{*0}K^-$ -1707

- $D^{*0}\bar{D}^{*0}K^-$ -1708
- $D^-D^+K^-$ -1709
- $D^{*-}D^+K^-$ -1710
- $D^-D^{*+}K^-$ -1711
- $D^{*-}D^{*+}K^-$ -1712
- $D^0D^-\bar{K}^{*0}$ -1713
- $D^{*0}D^-\bar{K}^{*0}$ -1714
- $D^0D^{*-}\bar{K}^{*0}$ -1715
- $D^{*0}D^{*-}\bar{K}^{*0}$ -1716
- $D^0\bar{D}^0K^{*-}$ -1717
- $D^{*0}\bar{D}^0K^{*-}$ -1718
- $D^0\bar{D}^{*0}K^{*-}$ -1719
- $D^{*0}\bar{D}^{*0}K^{*-}$ -1720
- $D^-D^+K^{*-}$ -1721
- $D^{*-}D^+K^{*-}$ -1722
- $D^-D^{*+}K^{*-}$ -1723
- $D^{*-}D^{*+}K^{*-}$ -1724
- D^-D^0 -1725
- $D^{*-}D^0$ -1726
- $D^{*0}D^-$ -1727
- $D^{*0}D^{*-}$ -1728
- $D^{*0}\pi^-$ -1729
- $D^0\pi^-$ -1730
- ρ^-D^0 -1731
- $D^{*0}\rho^-$ -1732

- $D^0\pi^0\pi^-$ −1733
- $D^{*0}\pi^0\pi^-$ −1734
- $D^+\pi^-\pi^-$ −1735
- $D^{*+}\pi^-\pi^-$ −1736
- $a_1^- D^0$ −1737
- $D^0\rho^0\pi^-$ −1738
- $D^0\pi^+\pi^-\pi^-$ −1739
- $D^{*0}a_1^-$ −1740
- $D^{*0}\rho^0\pi^-$ −1741
- $D^{*0}\pi^+\pi^-\pi^-$ −1742
- $D^+\rho^-\pi^-$ −1743
- $D^+\pi^0\pi^-\pi^-$ −1744
- $D^{*+}\rho^-\pi^-$ −1745
- $D^{*+}\pi^0\pi^-\pi^-$ −1746
- $D^{*0}\rho^-\pi^0$ −1747
- $D^{*0}\pi^-\pi^0\pi^0$ −1748
- $D_1^0\pi^-$ −1749
- $D_1'^0\pi^-$ −1750
- $D_2^{*0}\pi^-$ −1751
- $D_1^0\rho^-$ −1752
- $D_1'^0\rho^-$ −1753
- $D_2^{*0}\rho^-$ −1754
- $D_0^{*0}\pi^-$ −1755
- $D^0 K^-$ −1756
- $D^{*0}K^-$ −1757

- $K^{*-}D^0$ −1758
- $D^{*0}K^{*-}$ −1759
- $D^-\pi^0$ −1760
- $D^{*-}\pi^0$ −1761
- $D^-\bar{K}^0$ −1762
- $D^{*-}\bar{K}^0$ −1763
- $D^0 D_{s0}^{*-}$ −1764
- $D^{*0}D_{s0}^{*-}$ −1765
- $D_{s1}^- D^0$ −1766
- $D^{*0}D_{s1}^-$ −1767
- $D^0 K^-\bar{K}^0$ −1768
- $D^0 K^-\bar{K}^{*0}$ −1769
- $D^{*0}K^-\bar{K}^{*0}$ −1770
- $D^0\omega\pi^-$ −1771
- $D^{*0}\omega\pi^-$ −1772
- $D^0 D_{s1}'^-$ −1773
- $D^{*0}D_{s1}'^-$ −1774
- $cd_1\bar{u}u_1$ −1775
- $cs_1\bar{u}u_1$ −1776
- $\bar{u}dc\bar{u}$ −1777
- $\bar{u}dc\bar{u}$ −1778
- $\bar{u}sc\bar{u}$ −1779
- $\bar{c}sc\bar{u}$ −1780
- $\bar{c}dc\bar{u}$ −1781
- $\bar{u}du\bar{u}$ −1782

- $\bar{c}su\bar{u}$ −1783
- $\bar{u}ud\bar{u}$ −1784
- $\bar{d}dd\bar{u}$ −1785
- $\bar{s}sd\bar{u}$ −1786
- $\bar{u}us\bar{u}$ −1787
- $\bar{d}ds\bar{u}$ −1788
- $\bar{s}ss\bar{u}$ −1789
- $s\bar{u}$ −1790
- $D^0 K^-K^0$ −1791
- $D^0 K^-K^{*0}$ −1792
- $D^{*0}\pi^+\pi^-\pi^-\pi^0$ −1793
- $D^{*0}\pi^-\pi^-\pi^-\pi^+\pi^+$ −1794
- $D^{*+}\pi^-\pi^-\pi^-\pi^+$ −1795
- $D_s^+\pi^-K^-$ −1796
- $D_s^{*+}\pi^-K^-$ −1797
- $D_s^+ K^-K^-$ −1798
- ηK_0^{*-} −1799
- ηK_2^{*-} −1800
- ωK_0^{*-} −1801
- ωK_2^{*-} −1802
- $\bar{K}^{*0}\pi^-$ −1803
- $f_2 K^-$ −1804
- $\bar{K}_2^{*0}\pi^-$ −1805
- $K^{*-}\bar{K}^{*0}$ −1806
- ϕK_1^- −1807

- ϕK_2^{*-} -1808
- $\eta K^- \gamma$ -1809
- $\eta' K^- \gamma$ -1810
- $\phi K^- \gamma$ -1811
- $\bar{p}^- p^+ \pi^-$ -1812
- $\bar{p}^- p^+ K^-$ -1813
- $\bar{p}^- p^+ K^{*-}$ -1814

- $\bar{p}^- \Lambda^0 \gamma$ -1815
- $\bar{p}^- \Lambda^0 \pi^0$ -1816
- $\bar{p}^- \Lambda^0 \pi^- \pi^+$ -1817
- $\bar{p}^- \Lambda^0 \rho^0$ -1818
- $\bar{p}^- \Lambda^0 f_2$ -1819
- $\bar{\Lambda}^0 \Lambda^0 K^-$ -1820
- $\bar{\Lambda}^0 \Lambda^0 K^{*-}$ -1821

- $\Lambda_c^+ \bar{p}^- \pi^-$ -1822
- $\Lambda_c^+ \bar{p}^- \pi^- \pi^0$ -1823
- $\Lambda_c^+ \bar{p}^- \pi^- \pi^- \pi^+$ -1824
- $\Sigma_{c0} \bar{p}^-$ -1825
- $\Sigma_{c0} \bar{p}^- \pi^0$ -1826
- $\Sigma_{c0} \bar{p}^- \pi^+ \pi^-$ -1827
- $\Sigma_c^{++} \bar{p}^- \pi^- \pi^-$ -1828

C   List of tag numbers for B^0 decays

Tag numbers for the 1000 B^0 decays are following.

- $D^{*-} e^+ \nu_e$ $+1001$
- $D^- e^+ \nu_e$ $+1002$
- $D_1^- e^+ \nu_e$ $+1003$
- $D_0^{*-} e^+ \nu_e$ $+1004$
- $D_1'^- e^+ \nu_e$ $+1005$
- $D_2^{*-} e^+ \nu_e$ $+1006$
- $\bar{D}^{*0} \pi^- e^+ \nu_e$ $+1007$
- $D^{*-} \pi^0 e^+ \nu_e$ $+1008$
- $\bar{D}^0 \pi^- e^+ \nu_e$ $+1009$
- $D^- \pi^0 e^+ \nu_e$ $+1010$
- $D^- \pi^+ \pi^- e^+ \nu_e$ $+1011$
- $\bar{D}^0 \pi^- \pi^0 e^+ \nu_e$ $+1012$
- $D^- \pi^0 \pi^0 e^+ \nu_e$ $+1013$
- $D^{*-} \pi^+ \pi^- e^+ \nu_e$ $+1014$
- $\bar{D}^{*0} \pi^- \pi^0 e^+ \nu_e$ $+1015$
- $D^{*-} \pi^0 \pi^0 e^+ \nu_e$ $+1016$

- $D^- \eta e^+ \nu_e$ $+1017$
- $D^{*-} \eta e^+ \nu_e$ $+1018$
- $D^{*-} \mu^+ \nu_\mu$ $+1019$
- $D^- \mu^+ \nu_\mu$ $+1020$
- $D_1^- \mu^+ \nu_\mu$ $+1021$
- $D_0^{*-} \mu^+ \nu_\mu$ $+1022$
- $D_1'^- \mu^+ \nu_\mu$ $+1023$
- $D_2^{*-} \mu^+ \nu_\mu$ $+1024$
- $\bar{D}^{*0} \pi^- \mu^+ \nu_\mu$ $+1025$
- $D^{*-} \pi^0 \mu^+ \nu_\mu$ $+1026$
- $\bar{D}^0 \pi^- \mu^+ \nu_\mu$ $+1027$
- $D^- \pi^0 \mu^+ \nu_\mu$ $+1028$
- $D^- \pi^+ \pi^- \mu^+ \nu_\mu$ $+1029$
- $\bar{D}^0 \pi^- \pi^0 \mu^+ \nu_\mu$ $+1030$
- $D^- \pi^0 \pi^0 \mu^+ \nu_\mu$ $+1031$
- $D^{*-} \pi^+ \pi^- \mu^+ \nu_\mu$ $+1032$

- $\bar{D}^{*0} \pi^- \pi^0 \mu^+ \nu_\mu$ $+1033$
- $D^{*-} \pi^0 \pi^0 \mu^+ \nu_\mu$ $+1034$
- $D^- \eta \mu^+ \nu_\mu$ $+1035$
- $D^{*-} \eta \mu^+ \nu_\mu$ $+1036$
- $D^{*-} \tau^+ \nu_\tau$ $+1037$
- $D^- \tau^+ \nu_\tau$ $+1038$
- $D_1^- \tau^+ \nu_\tau$ $+1039$
- $D_0^{*-} \tau^+ \nu_\tau$ $+1040$
- $D_1'^- \tau^+ \nu_\tau$ $+1041$
- $D_2^{*-} \tau^+ \nu_\tau$ $+1042$
- $\pi^- e^+ \nu_e$ $+1043$
- $\rho^- e^+ \nu_e$ $+1044$
- $D(2S)^- e^+ \nu_e$ $+1045$
- $D^*(2S)^- e^+ \nu_e$ $+1046$
- $Xu^- e^+ \nu_e$ $+1047$
- $\pi^- \mu^+ \nu_\mu$ $+1048$
- $\rho^- \mu^+ \nu_\mu$ $+1049$

- $D(2S)^- \mu^+ \nu_\mu$ +1050
- $D^*(2S)^- \mu^+ \nu_\mu$ +1051
- $Xu^- \mu^+ \nu_\mu$ +1052
- $\pi^- \tau^+ \nu_\tau$ +1053
- $\rho^- \tau^+ \nu_\tau$ +1054
- $a_1^- \tau^+ \nu_\tau$ +1055
- $b_1^- \tau^+ \nu_\tau$ +1056
- $a_0^- \tau^+ \nu_\tau$ +1057
- $a_2^- \tau^+ \nu_\tau$ +1058
- $\rho(2S)^- \tau^+ \nu_\tau$ +1059
- $D(2S)^- \tau^+ \nu_\tau$ +1060
- $D^*(2S)^- \tau^+ \nu_\tau$ +1061
- $D_s^+ \pi^-$ +1062
- $D_s^- K^+$ +1063
- $D_s^{*+} \pi^-$ +1064
- $D_s^{*-} K^+$ +1065
- $\rho^- D_s^+$ +1066
- $K^{*+} D_s^-$ +1067
- $D_s^{*+} \rho^-$ +1068
- $D_s^{*-} K^{*+}$ +1069
- $K^{*0} \gamma$ +1070
- $\omega \gamma$ +1071
- $\rho^0 \gamma$ +1072
- $K_1^0 \gamma$ +1073
- $K_1'^0 \gamma$ +1074

- $K_2^{*0} \gamma$ +1075
- $K''^{*0} \gamma$ +1076
- $Xsd\gamma$ +1077
- $K^0 e^+ e^-$ +1078
- $K^{*0} e^+ e^-$ +1079
- $Xsd e^+ e^-$ +1080
- $\pi^+ \pi^- e^+ e^-$ +1081
- $K^0 \mu^+ \mu^-$ +1082
- $K^{*0} \mu^+ \mu^-$ +1083
- $\pi^+ \pi^- \mu^+ \mu^-$ +1084
- $Xsd \mu^+ \mu^-$ +1085
- $K^0 \tau^+ \tau^-$ +1086
- $K^{*0} \tau^+ \tau^-$ +1087
- $Xsd \tau^+ \tau^-$ +1088
- $\pi^+ \pi^-$ +1089
- $\pi^0 \pi^0$ +1090
- $\pi^0 \eta$ +1091
- $\pi^0 \eta'$ +1092
- $\pi^0 a_0^0$ +1093
- $\pi^0 f_0$ +1094
- $\pi^0 \omega$ +1095
- $\pi^0 a_1^0$ +1096
- $\pi^0 b_1^0$ +1097
- $\eta \eta$ +1098
- $\eta \eta'$ +1099

- ηa_0^0 +1100
- ηf_0 +1101
- $\eta \rho^0$ +1102
- $\eta \omega$ +1103
- ηa_1^0 +1104
- ηb_1^0 +1105
- $\eta' \eta'$ +1106
- $\eta' a_0^0$ +1107
- $\eta' f_0$ +1108
- $\eta' \rho^0$ +1109
- $\eta' \omega$ +1110
- $\eta' a_1^0$ +1111
- $\eta' b_1^0$ +1112
- $a_0^0 a_0^0$ +1113
- $a_0^0 f_0$ +1114
- $a_0^0 \rho^0$ +1115
- $a_0^0 \omega$ +1116
- $a_0^0 a_1^0$ +1117
- $a_0^0 b_1^0$ +1118
- $f_0 f_0$ +1119
- $f_0 \rho^0$ +1120
- $f_0 \omega$ +1121
- $f_0 a_1^0$ +1122
- $f_0 b_1^0$ +1123
- ϕK_S^0 +1124

- ϕK_L^0 +1125
- ηK_S^0 +1126
- ηK_L^0 +1127
- $\eta' K_S^0$ +1128
- $\eta' K_L^0$ +1129
- ωK_S^0 +1130
- ωK_L^0 +1131
- ϕK^0 +1132
- $\phi \bar{K}^0$ +1133
- ηK^0 +1134
- $\eta \bar{K}^0$ +1135
- $\eta' K^0$ +1136
- $\eta' \bar{K}^0$ +1137
- ωK^0 +1138
- $\omega \bar{K}^0$ +1139
- $\phi \pi^0$ +1140
- $\phi \eta$ +1141
- $\phi \eta'$ +1142
- $K^{*0} \eta$ +1143
- $K^{*0} \eta'$ +1144
- $K^{*0} \omega$ +1145
- $\phi \omega$ +1146
- $\omega \omega$ +1147
- $\omega \rho^0$ +1148
- $K^+ \pi^-$ +1149

- $K^+ K^-$ +1150
- $K_S^0 K_S^0$ +1151
- $K_S^0 K_L^0$ +1152
- $K_L^0 K_L^0$ +1153
- $K^0 \pi^0$ +1154
- $K_S^0 \pi^0$ +1155
- $K_L^0 \pi^0$ +1156
- $K^0 \bar{K}^0$ +1157
- $\pi^- \pi^+ \pi^0$ +1158
- $\rho^0 \pi^0$ +1159
- $\rho^+ \pi^-$ +1160
- $\rho^- \pi^+$ +1161
- $\rho(2S)^+ \pi^-$ +1162
- $\rho(2S)^- \pi^+$ +1163
- $\rho(3S)^+ \pi^-$ +1164
- $\rho(3S)^- \pi^+$ +1165
- $\rho^0 K_S^0$ +1166
- $\rho^0 K_L^0$ +1167
- $\rho^- K^+$ +1168
- $\rho(2S)^0 K_S^0$ +1169
- $\rho(2S)^0 K_L^0$ +1170
- $f_0 K^0$ +1171
- $a_0^0 K^0$ +1172
- $a_0^- K^+$ +1173
- $a_0^+ \pi^-$ +1174

- $a_0^- \pi^+$ +1175
- $K^{*0} \pi^0$ +1176
- $K^{*0} \bar{K}^0$ +1177
- $K_0^{*0} \pi^0$ +1178
- $K_0^{*0} \bar{K}^0$ +1179
- $K''^{*0} \pi^0$ +1180
- $K''^{*0} K^0$ +1181
- $K^{*+} \pi^-$ +1182
- $K^{*+} K^-$ +1183
- $K_0^{*+} \pi^-$ +1184
- $K_0^{*+} K^-$ +1185
- $K''^{*+} \pi^-$ +1186
- $K''^{*+} K^-$ +1187
- $\pi^+ \pi^- \eta$ +1188
- $\pi^+ \pi^- \eta'$ +1189
- $\pi^+ \pi^- K^0$ +1190
- $K^+ \pi^- \pi^0$ +1191
- $K^+ \pi^- \eta$ +1192
- $K^+ \pi^- \eta'$ +1193
- $\pi^+ K^- K^0$ +1194
- $\pi^- K^+ \bar{K}^0$ +1195
- $K^+ K^- K^0$ +1196
- $K^+ K^- K_S^0$ +1197
- $K^+ K^- K_L^0$ +1198
- $K^+ K^- \pi^0$ +1199

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- $K^+ K^- \eta$ +1200
- $K^+ K^- \eta'$ +1201
- $K^0 \bar{K}^0 \pi^0$ +1202
- $K^0 \bar{K}^0 \eta$ +1203
- $K^0 \bar{K}^0 \eta'$ +1204
- $K^0 \pi^0 \pi^0$ +1205
- $K^0 \pi^0 \eta$ +1206
- $K^0 \pi^0 \eta'$ +1207
- $K^0 \eta\eta$ +1208
- $K^0 \eta\eta'$ +1209
- $K^0 \eta'\eta'$ +1210
- $K^0 \bar{K}^0 K^0$ +1211
- $\pi^0 \pi^0 \pi^0$ +1212
- $\pi^0 \pi^0 \eta$ +1213
- $\pi^0 \pi^0 \eta'$ +1214
- $\pi^0 \eta\eta$ +1215
- $\pi^0 \eta\eta'$ +1216
- $K^{*0} \pi^0 \pi^0$ +1217
- $\rho^0 \rho^0$ +1218
- $\rho^+ \rho^-$ +1219
- $\rho^0 \pi^+ \pi^-$ +1220
- $\omega \pi^+ \pi^-$ +1221
- $\rho^0 \pi^0 \pi^0$ +1222
- $\omega \pi^0 \pi^0$ +1223
- $\rho^0 \pi^0 \eta$ +1224

- $\rho^0 \eta\eta$ +1225
- $\rho^0 \pi^0 \eta'$ +1226
- $\rho^0 \eta\eta'$ +1227
- $\omega \pi^0 \eta$ +1228
- $\omega \eta\eta$ +1229
- $\omega \pi^0 \eta'$ +1230
- $\omega \eta\eta'$ +1231
- $\rho^+ \pi^- \pi^0$ +1232
- $\rho^+ \pi^- \eta$ +1233
- $\rho^- \pi^+ \pi^0$ +1234
- $\rho^- \pi^+ \eta$ +1235
- $\pi^+ \pi^- \pi^+ \pi^-$ +1236
- $\pi^+ \pi^- \pi^0 \pi^0$ +1237
- $\pi^+ \pi^- \eta\pi^0$ +1238
- $\pi^+ \pi^- \eta\eta$ +1239
- $\pi^+ \pi^- \eta'\pi^0$ +1240
- $\pi^+ \pi^- \eta'\eta$ +1241
- $a_1^+ \pi^-$ +1242
- $a_1^- \pi^+$ +1243
- $b_1^+ \pi^-$ +1244
- $b_1^- \pi^+$ +1245
- $\rho^- a_0^+$ +1246
- $\rho^+ a_0^-$ +1247
- $f_0 \pi^+ \pi^-$ +1248
- $f_0 \pi^0 \pi^0$ +1249

- $a_0^- \pi^+ \pi^0$ +1250
- $a_0^0 \pi^0 \pi^0$ +1251
- $a_0^+ \pi^- \pi^0$ +1252
- $\rho^0 K^{*0}$ +1253
- $\rho^- K^{*+}$ +1254
- $\pi^- \pi^+ K^{*0}$ +1255
- $\pi^- \pi^0 K^{*+}$ +1256
- $\pi^- \eta K^{*+}$ +1257
- $\pi^- \eta' K^{*+}$ +1258
- $\rho^- K^+ \pi^0$ +1259
- $\rho^- K^+ \eta$ +1260
- $\rho^- K^+ \eta'$ +1261
- $\rho^- K^0 \pi^+$ +1262
- $\rho^+ K^0 \pi^-$ +1263
- $\rho^0 K^0 \pi^0$ +1264
- $\rho^0 K^0 \eta$ +1265
- $\rho^0 K^0 \eta'$ +1266
- $\rho^0 K^+ \pi^-$ +1267
- $\omega K^0 \pi^0$ +1268
- $\omega K^0 \eta$ +1269
- $\omega K^0 \eta'$ +1270
- $\omega K^+ \pi^-$ +1271
- $\pi^+ \pi^0 \pi^- K^0$ +1272
- $\pi^+ \eta\pi^- K^0$ +1273
- $\pi^0 \pi^0 \pi^0 K^0$ +1274

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• $\pi^0\pi^0\eta K^0$	+1275	• $\phi\pi^-\pi^+$	+1300	• $K^-K^{*0}\pi^+$	+1325
• $\pi^0\eta\eta K^0$	+1276	• $K^+K^-\rho^0$	+1301	• $K^{*-}K^0\pi^+$	+1326
• $\pi^0\pi^0\eta' K^0$	+1277	• $K^0\bar{K}^0\rho^0$	+1302	• ϕK^{*0}	+1327
• $\pi^0\eta\eta' K^0$	+1278	• $K^+K^-\omega$	+1303	• $\phi K^+\pi^-$	+1328
• $\pi^+\pi^-\pi^- K^+$	+1279	• $K^0\bar{K}^0\omega$	+1304	• $\phi K^0\pi^0$	+1329
• $\pi^0\pi^0\pi^- K^+$	+1280	• $K^+\bar{K}^0\rho^-$	+1305	• $\phi K^0\eta$	+1330
• $\pi^0\eta\pi^- K^+$	+1281	• $K^-K^0\rho^+$	+1306	• $K^-K^+K^{*0}$	+1331
• $\eta\eta\pi^- K^+$	+1282	• $K^+K^-\pi^-\pi^+$	+1307	• $K^-K^{*+}K^0$	+1332
• $\pi^0\eta'\pi^- K^+$	+1283	• $K^+K^-\pi^0\pi^0$	+1308	• $K^{*-}K^+K^0$	+1333
• $\eta\eta'\pi^- K^+$	+1284	• $K^+K^-\pi^0\eta$	+1309	• $K^+K^-K^+\pi^-$	+1334
• $\rho^0 K_0^{*0}$	+1285	• $K^+K^-\eta\eta$	+1310	• $K^+K^-K^0\pi^0$	+1335
• $\rho^- K_0^{*+}$	+1286	• $K^+K^-\pi^0\eta'$	+1311	• $K^+K^-K^0\eta$	+1336
• $\pi^-\pi^+ K_0^{*0}$	+1287	• $K^+K^-\eta\eta'$	+1312	• $K^0\bar{K}^0K^0\pi^0$	+1337
• $\pi^0\pi^0 K_0^{*0}$	+1288	• $K^0\bar{K}^0\pi^-\pi^+$	+1313	• $K^0\bar{K}^0K^0\eta$	+1338
• $\pi^-\pi^0 K_0^{*+}$	+1289	• $K^0\bar{K}^0\pi^0\pi^0$	+1314	• ϕK_0^{*0}	+1339
• $K^{*0}f_0$	+1290	• $K^0\bar{K}^0\pi^0\eta$	+1315	• $K^-K^+K_0^{*0}$	+1340
• $a_1^0 K^0$	+1291	• $K^0\bar{K}^0\eta\eta$	+1316	• $K^-K_0^{*+}K^0$	+1341
• $a_1^- K^+$	+1292	• $K^0\bar{K}^0\pi^0\eta'$	+1317	• $K_0^{*-}K^+K^0$	+1342
• $b_1^0 K^0$	+1293	• $K^0\bar{K}^0\eta\eta'$	+1318	• $\phi K_1'^0$	+1343
• $b_1^- K^+$	+1294	• $K^{*+}K^-\pi^0$	+1319	• $K^-K^+K_1'^0$	+1344
• $K^{*0}a_0^0$	+1295	• $K^{*-}K^+\pi^0$	+1320	• $\phi\phi$	+1345
• $K^{*+}a_0^-$	+1296	• $K^{*0}\bar{K}^0\pi^0$	+1321	• ϕK^+K^-	+1346
• $K^{*0}\bar{K}^{*0}$	+1297	• $K^0\bar{K}^{*0}\pi^0$	+1322	• $\phi K^0\bar{K}^0$	+1347
• $K^{*+}K^{*-}$	+1298	• $K^+\bar{K}^{*0}\pi^-$	+1323	• $K^+K^-K^+K^-$	+1348
• $\phi\rho^0$	+1299	• $K^{*+}\bar{K}^0\pi^-$	+1324	• $K^0\bar{K}^0K^+K^-$	+1349

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- $K^0 \bar{K}^0 K^0 \bar{K}^0$ +1350
- $\rho^0 \rho^0 \pi^0$ +1351
- $\rho^0 \rho^0 \eta$ +1352
- $\rho^0 \rho^0 \eta'$ +1353
- $\omega \rho^0 \pi^0$ +1354
- $\omega \rho^0 \eta$ +1355
- $\omega \rho^0 \eta'$ +1356
- $\rho^+ \rho^- \pi^0$ +1357
- $\rho^+ \rho^- \eta$ +1358
- $\rho^+ \rho^- \eta'$ +1359
- $\rho^0 \rho^- \pi^+$ +1360
- $\omega \rho^- \pi^+$ +1361
- $\rho^0 \pi^+ \pi^- \pi^0$ +1362
- $\rho^0 \pi^+ \pi^- \eta$ +1363
- $\rho^0 \pi^+ \pi^- \eta'$ +1364
- $\rho^0 \pi^0 \pi^0 \pi^0$ +1365
- $\rho^0 \pi^0 \eta \pi^0$ +1366
- $\rho^0 \pi^0 \eta' \pi^0$ +1367
- $\omega \pi^+ \pi^- \pi^0$ +1368
- $\omega \pi^+ \pi^- \eta$ +1369
- $\omega \pi^+ \pi^- \eta'$ +1370
- $\omega \pi^0 \pi^0 \pi^0$ +1371
- $\omega \pi^0 \eta \pi^0$ +1372
- $\omega \pi^0 \eta' \pi^0$ +1373
- $\rho^+ \pi^- \pi^+ \pi^-$ +1374

- $\rho^+ \pi^- \pi^0 \pi^0$ +1375
- $\rho^+ \pi^- \pi^0 \eta$ +1376
- $\rho^+ \pi^- \pi^0 \eta'$ +1377
- $\rho^- \pi^+ \pi^+ \pi^-$ +1378
- $\rho^- \pi^+ \pi^0 \pi^0$ +1379
- $\rho^- \pi^+ \pi^0 \eta$ +1380
- $\rho^- \pi^+ \pi^0 \eta'$ +1381
- $\pi^+ \pi^- \pi^+ \pi^- \pi^0$ +1382
- $\pi^+ \pi^- \pi^+ \pi^- \eta$ +1383
- $\pi^+ \pi^- \pi^+ \pi^- \eta'$ +1384
- $\pi^+ \pi^- \pi^0 \pi^0 \pi^0$ +1385
- $\pi^+ \pi^- \pi^0 \pi^0 \eta$ +1386
- $\pi^+ \pi^- \pi^0 \pi^0 \eta'$ +1387
- $\pi^0 \pi^0 \pi^0 \pi^0 \pi^0$ +1388
- $\pi^0 \pi^0 \pi^0 \pi^0 \eta$ +1389
- $\pi^0 \pi^0 \pi^0 \pi^0 \eta'$ +1390
- $a_1^+ \rho^-$ +1391
- $a_1^- \rho^+$ +1392
- $a_1^0 \rho^0$ +1393
- $a_1^0 \omega$ +1394
- $a_1^+ \pi^- \pi^0$ +1395
- $a_1^+ \pi^- \eta$ +1396
- $a_1^+ \pi^- \eta'$ +1397
- $a_1^0 \pi^+ \pi^-$ +1398
- $a_1^0 \pi^0 \pi^0$ +1399

- $a_1^0 \pi^0 \eta$ +1400
- $a_1^0 \pi^0 \eta'$ +1401
- $a_1^- \pi^+ \pi^0$ +1402
- $a_1^- \pi^+ \eta$ +1403
- $a_1^- \pi^+ \eta'$ +1404
- $\rho^+ f_0 \pi^-$ +1405
- $\rho^- f_0 \pi^+$ +1406
- $\rho^0 f_0 \pi^0$ +1407
- $\rho^0 f_0 \eta$ +1408
- $\rho^0 f_0 \eta'$ +1409
- $\omega f_0 \pi^0$ +1410
- $\rho^+ a_0^0 \pi^-$ +1411
- $\rho^+ a_0^- \pi^0$ +1412
- $\rho^+ a_0^- \eta$ +1413
- $\rho^+ a_0^- \eta'$ +1414
- $\rho^0 a_0^+ \pi^-$ +1415
- $\rho^0 a_0^- \pi^+$ +1416
- $\rho^0 a_0^0 \pi^0$ +1417
- $\rho^0 a_0^0 \eta$ +1418
- $\rho^0 a_0^0 \eta'$ +1419
- $\rho^- a_0^0 \pi^+$ +1420
- $\rho^- a_0^+ \pi^0$ +1421
- $\rho^- a_0^+ \eta$ +1422
- $\rho^- a_0^+ \eta'$ +1423
- $f_0 \pi^+ \pi^- \pi^0$ +1424

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- $f_0 \pi^+ \pi^- \eta$ $+1425$
- $f_0 \pi^+ \pi^- \eta'$ $+1426$
- $f_0 \pi^0 \pi^0 \pi^0$ $+1427$
- $f_0 \pi^0 \pi^0 \eta$ $+1428$
- $f_0 \pi^0 \pi^0 \eta'$ $+1429$
- $a_0^0 \pi^+ \pi^- \pi^0$ $+1430$
- $a_0^0 \pi^0 \pi^0 \pi^0$ $+1431$
- $a_0^+ \pi^- \pi^+ \pi^-$ $+1432$
- $a_0^+ \pi^- \pi^0 \pi^0$ $+1433$
- $a_0^- \pi^+ \pi^+ \pi^-$ $+1434$
- $a_0^- \pi^+ \pi^0 \pi^0$ $+1435$
- $\rho^0 K^{*+} \pi^-$ $+1436$
- $\rho^- K^{*+} \pi^0$ $+1437$
- $\rho^- K^{*+} \eta$ $+1438$
- $\rho^- K^{*+} \eta'$ $+1439$
- $\rho^0 K^{*0} \pi^0$ $+1440$
- $\rho^0 K^{*0} \eta$ $+1441$
- $\rho^0 K^{*0} \eta'$ $+1442$
- $\rho^- K^{*0} \pi^+$ $+1443$
- $\rho^+ K^{*0} \pi^-$ $+1444$
- $\omega K^{*+} \pi^-$ $+1445$
- $\omega K^{*0} \pi^0$ $+1446$
- $\omega K^{*0} \eta$ $+1447$
- $\omega K^{*0} \eta'$ $+1448$
- $\pi^+ \pi^- K^{*+} \pi^-$ $+1449$

- $\pi^- \pi^0 K^{*+} \pi^0$ $+1450$
- $\pi^- \pi^0 K^{*+} \eta$ $+1451$
- $\pi^- \pi^0 K^{*+} \eta'$ $+1452$
- $\pi^+ \pi^- K^{*0} \pi^0$ $+1453$
- $\pi^+ \pi^- K^{*0} \eta$ $+1454$
- $\pi^+ \pi^- K^{*0} \eta'$ $+1455$
- $\pi^0 \pi^0 K^{*0} \pi^0$ $+1456$
- $\pi^0 \pi^0 K^{*0} \eta$ $+1457$
- $\pi^0 \pi^0 K^{*0} \eta'$ $+1458$
- $\rho^+ K^+ \pi^- \pi^-$ $+1459$
- $\rho^0 K^+ \pi^- \pi^0$ $+1460$
- $\rho^0 K^+ \pi^- \eta$ $+1461$
- $\rho^0 K^+ \pi^- \eta'$ $+1462$
- $\rho^- K^+ \pi^+ \pi^-$ $+1463$
- $\rho^- K^+ \pi^0 \pi^0$ $+1464$
- $\rho^- K^+ \pi^0 \eta$ $+1465$
- $\rho^- K^+ \pi^0 \eta'$ $+1466$
- $\rho^0 K^0 \pi^+ \pi^-$ $+1467$
- $\rho^0 K^0 \pi^0 \pi^0$ $+1468$
- $\rho^0 K^0 \pi^0 \eta$ $+1469$
- $\rho^0 K^0 \pi^0 \eta'$ $+1470$
- $\rho^+ K^0 \pi^- \pi^0$ $+1471$
- $\rho^+ K^0 \pi^- \eta$ $+1472$
- $\rho^+ K^0 \pi^- \eta'$ $+1473$
- $\rho^- K^0 \pi^+ \pi^0$ $+1474$

- $\rho^- K^0 \pi^+ \eta$ $+1475$
- $\rho^- K^0 \pi^+ \eta'$ $+1476$
- $\omega K^+ \pi^- \pi^0$ $+1477$
- $\omega K^+ \pi^- \eta$ $+1478$
- $\omega K^+ \pi^- \eta'$ $+1479$
- $\omega K^0 \pi^+ \pi^-$ $+1480$
- $\omega K^0 \pi^0 \pi^0$ $+1481$
- $\omega K^0 \pi^0 \eta$ $+1482$
- $\omega K^0 \pi^0 \eta'$ $+1483$
- $\pi^+ \pi^- \pi^- K^+ \pi^0$ $+1484$
- $\pi^+ \pi^- \pi^- K^+ \eta$ $+1485$
- $\pi^+ \pi^- \pi^- K^+ \eta'$ $+1486$
- $\pi^0 \pi^0 \pi^- K^+ \pi^0$ $+1487$
- $\pi^0 \pi^0 \pi^- K^+ \eta$ $+1488$
- $\pi^0 \pi^0 \pi^- K^+ \eta'$ $+1489$
- $\pi^+ \pi^- \pi^+ K^0 \pi^-$ $+1490$
- $\pi^+ \pi^- \pi^0 K^0 \pi^0$ $+1491$
- $\pi^+ \pi^- \pi^0 K^0 \eta$ $+1492$
- $\pi^+ \pi^- \pi^0 K^0 \eta'$ $+1493$
- $\pi^0 \pi^0 \pi^0 K^0 \pi^0$ $+1494$
- $\pi^0 \pi^0 \pi^0 K^0 \eta$ $+1495$
- $\pi^0 \pi^0 \pi^0 K^0 \eta'$ $+1496$
- $\rho^+ K_0^{*0} \pi^-$ $+1497$
- $\rho^0 K_0^{*0} \pi^0$ $+1498$
- $\rho^0 K_0^{*0} \eta$ $+1499$

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- $\rho^0 K_0^{*0} \eta'$ +1500
- $\rho^- K_0^{*0} \pi^+$ +1501
- $\rho^- K_0^{*+} \pi^0$ +1502
- $\rho^- K_0^{*+} \eta$ +1503
- $\rho^- K_0^{*+} \eta'$ +1504
- $\rho^0 K_0^{*+} \pi^-$ +1505
- $\pi^+ \pi^- K_0^{*+} \pi^-$ +1506
- $\pi^- \pi^0 K_0^{*+} \pi^0$ +1507
- $\pi^- \pi^0 K_0^{*+} \eta$ +1508
- $\pi^- \pi^0 K_0^{*+} \eta'$ +1509
- $\pi^+ \pi^- K_0^{*0} \pi^0$ +1510
- $\pi^+ \pi^- K_0^{*0} \eta$ +1511
- $\pi^+ \pi^- K_0^{*0} \eta'$ +1512
- $\pi^0 \pi^0 K_0^{*0} \pi^0$ +1513
- $\pi^0 \pi^0 K_0^{*0} \eta$ +1514
- $\pi^0 \pi^0 K_0^{*0} \eta'$ +1515
- $K^{*+} f_0 \pi^-$ +1516
- $K^{*0} f_0 \pi^0$ +1517
- $K^{*0} f_0 \eta$ +1518
- $K^{*0} f_0 \eta'$ +1519
- $a_1^+ K^0 \pi^-$ +1520
- $a_1^0 K^{*0}$ +1521
- $a_1^0 K^+ \pi^-$ +1522
- $a_1^0 K^0 \pi^0$ +1523
- $a_1^- K^{*+}$ +1524

- $a_1^- K^+ \pi^0$ +1525
- $a_1^- K^0 \pi^+$ +1526
- $K^{*+} a_0^0 \pi^-$ +1527
- $K^{*+} a_0^- \pi^0$ +1528
- $K^{*+} a_0^- \eta$ +1529
- $K^{*+} a_0^- \eta'$ +1530
- $K^{*0} a_0^+ \pi^-$ +1531
- $K^{*0} a_0^0 \pi^0$ +1532
- $K^{*0} a_0^0 \eta$ +1533
- $K^{*0} a_0^0 \eta'$ +1534
- $K^{*-} K^{*0} \pi^+$ +1535
- $K^{*+} \bar{K}^{*0} \pi^-$ +1536
- $K^{*-} K^{*+} \pi^0$ +1537
- $K^{*-} K^{*+} \eta$ +1538
- $K^{*-} K^{*+} \eta'$ +1539
- $K^{*0} \bar{K}^{*0} \pi^0$ +1540
- $K^{*0} \bar{K}^{*0} \eta$ +1541
- $K^{*0} \bar{K}^{*0} \eta'$ +1542
- $\phi \rho^+ \pi^-$ +1543
- $\phi \rho^- \pi^+$ +1544
- $\phi \rho^0 \pi^0$ +1545
- $\phi \rho^0 \eta$ +1546
- $\phi \rho^0 \eta'$ +1547
- $\phi \omega \pi^0$ +1548
- $\phi f_0 \pi^0$ +1549

- $\phi \pi^+ \pi^- \pi^0$ +1550
- $\phi \pi^+ \pi^- \eta$ +1551
- $\phi \pi^+ \pi^- \eta'$ +1552
- $\phi \pi^0 \pi^0 \pi^0$ +1553
- $\phi \pi^0 \pi^0 \eta$ +1554
- $\phi \pi^0 \pi^0 \eta'$ +1555
- $K^0 K^- \rho^0 \pi^+$ +1556
- $K^0 K^- \rho^+ \pi^0$ +1557
- $K^0 K^- \rho^+ \eta$ +1558
- $K^0 K^- \rho^+ \eta'$ +1559
- $K^0 K^- \omega \pi^+$ +1560
- $K^0 K^- f_0 \pi^+$ +1561
- $K^+ K^- \rho^+ \pi^-$ +1562
- $K^+ K^- \rho^- \pi^+$ +1563
- $K^+ K^- \rho^0 \pi^0$ +1564
- $K^+ K^- \rho^0 \eta$ +1565
- $K^+ K^- \rho^0 \eta'$ +1566
- $K^+ K^- \omega \pi^0$ +1567
- $K^+ K^- \omega \eta$ +1568
- $K^+ K^- \omega \eta'$ +1569
- $K^+ K^- f_0 \pi^0$ +1570
- $K^0 \bar{K}^0 \rho^+ \pi^-$ +1571
- $K^0 \bar{K}^0 \rho^- \pi^+$ +1572
- $K^0 \bar{K}^0 \rho^0 \pi^0$ +1573
- $K^0 \bar{K}^0 \rho^0 \eta$ +1574

- $K^0 \bar{K}^0 \rho^0 \eta'$ $\quad$ +1575
- $K^0 \bar{K}^0 \omega \pi^0$ $\quad$ +1576
- $K^0 \bar{K}^0 f_0 \pi^0$ $\quad$ +1577
- $\bar{K}^0 K^+ \rho^0 \pi^-$ $\quad$ +1578
- $\bar{K}^0 K^+ \rho^- \pi^0$ $\quad$ +1579
- $\bar{K}^0 K^+ \rho^- \eta$ $\quad$ +1580
- $\bar{K}^0 K^+ \rho^- \eta'$ $\quad$ +1581
- $\bar{K}^0 K^+ \omega \pi^-$ $\quad$ +1582
- $\bar{K}^0 K^+ f_0 \pi^-$ $\quad$ +1583
- $K^0 K^- \pi^+ \pi^+ \pi^-$ $\quad$ +1584
- $K^0 K^- \pi^+ \pi^0 \pi^0$ $\quad$ +1585
- $K^0 K^- \pi^+ \pi^0 \eta$ $\quad$ +1586
- $K^0 K^- \pi^+ \pi^0 \eta'$ $\quad$ +1587
- $K^+ K^- \pi^+ \pi^- \pi^0$ $\quad$ +1588
- $K^+ K^- \pi^+ \pi^- \eta$ $\quad$ +1589
- $K^+ K^- \pi^+ \pi^- \eta'$ $\quad$ +1590
- $K^+ K^- \pi^0 \pi^0 \pi^0$ $\quad$ +1591
- $K^+ K^- \pi^0 \pi^0 \eta$ $\quad$ +1592
- $K^+ K^- \pi^0 \pi^0 \eta'$ $\quad$ +1593
- $K^0 \bar{K}^0 \pi^+ \pi^- \pi^0$ $\quad$ +1594
- $K^0 \bar{K}^0 \pi^+ \pi^- \eta$ $\quad$ +1595
- $K^0 \bar{K}^0 \pi^+ \pi^- \eta'$ $\quad$ +1596
- $K^0 \bar{K}^0 \pi^0 \pi^0 \pi^0$ $\quad$ +1597
- $K^0 \bar{K}^0 \pi^0 \pi^0 \eta$ $\quad$ +1598
- $K^0 \bar{K}^0 \pi^0 \pi^0 \eta'$ $\quad$ +1599

- $\bar{K}^0 K^+ \pi^- \pi^+ \pi^-$ $\quad$ +1600
- $\bar{K}^0 K^+ \pi^- \pi^0 \pi^0$ $\quad$ +1601
- $\bar{K}^0 K^+ \pi^- \pi^0 \eta$ $\quad$ +1602
- $\bar{K}^0 K^+ \pi^- \pi^0 \eta'$ $\quad$ +1603
- $K^{*0} K^- \pi^+ \pi^0$ $\quad$ +1604
- $K^{*0} K^- \pi^+ \eta$ $\quad$ +1605
- $K^{*0} K^- \pi^+ \eta'$ $\quad$ +1606
- $K^{*-} K^0 \pi^+ \pi^0$ $\quad$ +1607
- $K^{*-} K^0 \pi^+ \eta$ $\quad$ +1608
- $K^{*-} K^0 \pi^+ \eta'$ $\quad$ +1609
- $K^{*+} K^- \pi^+ \pi^-$ $\quad$ +1610
- $K^{*+} K^- \pi^0 \pi^0$ $\quad$ +1611
- $K^{*+} K^- \pi^0 \eta$ $\quad$ +1612
- $K^{*+} K^- \pi^0 \eta'$ $\quad$ +1613
- $K^{*-} K^+ \pi^+ \pi^-$ $\quad$ +1614
- $K^{*-} K^+ \pi^0 \pi^0$ $\quad$ +1615
- $K^{*-} K^+ \pi^0 \eta$ $\quad$ +1616
- $K^{*-} K^+ \pi^0 \eta'$ $\quad$ +1617
- $K^{*0} \bar{K}^0 \pi^+ \pi^-$ $\quad$ +1618
- $K^{*0} \bar{K}^0 \pi^0 \pi^0$ $\quad$ +1619
- $K^{*0} \bar{K}^0 \pi^0 \eta$ $\quad$ +1620
- $K^{*0} \bar{K}^0 \pi^0 \eta'$ $\quad$ +1621
- $K^0 \bar{K}^{*0} \pi^+ \pi^-$ $\quad$ +1622
- $K^0 \bar{K}^{*0} \pi^0 \pi^0$ $\quad$ +1623
- $K^0 \bar{K}^{*0} \pi^0 \eta$ $\quad$ +1624

- $K^0 \bar{K}^{*0} \pi^0 \eta'$ $\quad$ +1625
- $K^+ \bar{K}^{*0} \pi^- \pi^0$ $\quad$ +1626
- $K^+ \bar{K}^{*0} \pi^- \eta$ $\quad$ +1627
- $K^+ \bar{K}^{*0} \pi^- \eta'$ $\quad$ +1628
- $K^{*+} \bar{K}^0 \pi^- \pi^0$ $\quad$ +1629
- $K^{*+} \bar{K}^0 \pi^- \eta$ $\quad$ +1630
- $K^{*+} \bar{K}^0 \pi^- \eta'$ $\quad$ +1631
- $\phi K^{*+} \pi^-$ $\quad$ +1632
- $\phi K^{*0} \pi^0$ $\quad$ +1633
- $\phi K^{*0} \eta$ $\quad$ +1634
- $\phi K^{*0} \eta'$ $\quad$ +1635
- $\phi K^+ \rho^-$ $\quad$ +1636
- $\phi K^0 \rho^0$ $\quad$ +1637
- $\phi K^0 \omega$ $\quad$ +1638
- $\phi K^0 f_0$ $\quad$ +1639
- $\phi K^0 \pi^+ \pi^-$ $\quad$ +1640
- $\phi K^0 \pi^0 \pi^0$ $\quad$ +1641
- $\phi K^0 \pi^0 \eta$ $\quad$ +1642
- $\phi K^0 \pi^0 \eta'$ $\quad$ +1643
- $\phi K^+ \pi^- \pi^0$ $\quad$ +1644
- $\phi K^+ \pi^- \eta$ $\quad$ +1645
- $\phi K^+ \pi^- \eta'$ $\quad$ +1646
- $K^- K^+ K^{*+} \pi^-$ $\quad$ +1647
- $K^+ K^{*-} K^+ \pi^-$ $\quad$ +1648
- $K^+ K^{*0} \bar{K}^0 \pi^-$ $\quad$ +1649

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- $K^+ K^0 \bar{K}^{*0} \pi^-$ +1650
- $K^0 K^{*+} \bar{K}^0 \pi^-$ +1651
- $K^- K^+ K^+ \rho^-$ +1652
- $K^- K^+ K^0 \rho^0$ +1653
- $K^- K^+ K^0 \omega$ +1654
- $K^- K^+ K^0 f_0$ +1655
- $K^+ K^- K^+ \pi^- \pi^0$ +1656
- $K^+ K^- K^+ \pi^- \eta$ +1657
- $K^+ K^- K^+ \pi^- \eta'$ +1658
- $K^+ K^- K^0 \pi^+ \pi^-$ +1659
- $K^+ K^- K^0 \pi^0 \pi^0$ +1660
- $K^+ K^- K^0 \pi^0 \eta$ +1661
- $K^+ K^- K^0 \pi^0 \eta'$ +1662
- $K^0 \bar{K}^0 K^+ \pi^- \pi^0$ +1663
- $K^0 \bar{K}^0 K^+ \pi^- \eta$ +1664
- $K^0 \bar{K}^0 K^+ \pi^- \eta'$ +1665
- $K^0 \bar{K}^0 K^0 \pi^+ \pi^-$ +1666
- $K^0 \bar{K}^0 K^0 \pi^0 \pi^0$ +1667
- $K^0 \bar{K}^0 K^0 \pi^0 \eta$ +1668
- $K^0 \bar{K}^0 K^0 \pi^0 \eta'$ +1669
- $\phi K_0^{*+} \pi^-$ +1670
- $\phi K_0^{*0} \pi^0$ +1671
- $K^+ K^- K_0^{*+} \pi^-$ +1672
- $K^+ K^- K_0^{*0} \pi^0$ +1673
- $K^+ K^- K_0^{*0} \eta$ +1674

- $K^+ K^- K_0^{*0} \eta'$ +1675
- $K^+ K^+ K_0^{*-} \pi^-$ +1676
- $K^+ \bar{K}_0^{*0} K^0 \pi^-$ +1677
- $K^+ K_0^{*0} \bar{K}^0 \pi^-$ +1678
- $K^0 \bar{K}^0 K_0^{*+} \pi^-$ +1679
- $K^0 \bar{K}^0 K_0^{*0} \pi^0$ +1680
- $K^0 \bar{K}^0 K_0^{*0} \eta$ +1681
- $K^0 \bar{K}^0 K_0^{*0} \eta'$ +1682
- $K^0 K^0 \bar{K}_0^{*0} \pi^0$ +1683
- $K^0 K^0 \bar{K}_0^{*0} \eta$ +1684
- $K^0 K^0 \bar{K}_0^{*0} \eta'$ +1685
- $\phi K_1'^+ \pi^-$ +1686
- $\phi K_1'^0 \pi^0$ +1687
- $\phi K_1'^0 \eta$ +1688
- $\phi K_1'^0 \eta'$ +1689
- $K^- K^+ K_1'^+ \pi^-$ +1690
- $K^- K^+ K_1'^0 \pi^0$ +1691
- $K^- K^+ K_1'^0 \eta$ +1692
- $K^- K^+ K_1'^0 \eta'$ +1693
- $K^+ K^+ K_1'^- \pi^-$ +1694
- $K^0 \bar{K}^0 K_1'^0 \pi^0$ +1695
- $K^0 \bar{K}^0 K_1'^0 \eta$ +1696
- $K^0 \bar{K}^0 K_1'^0 \eta'$ +1697
- $K^0 K^0 \bar{K}_1'^0 \pi^0$ +1698
- $K^0 K^0 \bar{K}_1'^0 \eta$ +1699

- $K^0 K^0 \bar{K}_1'^0 \eta'$ +1700
- $\phi\phi K^0$ +1701
- $\phi\phi \pi^0$ +1702
- $\phi K^+ K^- K^0$ +1703
- $\phi K^0 \bar{K}^0 K^0$ +1704
- $\phi K^+ K^- \pi^0$ +1705
- $\phi K^0 \bar{K}^0 \pi^0$ +1706
- $\phi \bar{K}^0 K^+ \pi^-$ +1707
- $\phi K^0 K^- \pi^+$ +1708
- $K^+ K^- K^+ K^- K^0$ +1709
- $K^0 \bar{K}^0 K^+ K^- K^0$ +1710
- $K^+ K^- K^+ K^- \pi^0$ +1711
- $K^+ K^- K^0 \bar{K}^0 \pi^0$ +1712
- $K^+ K^- K^+ \bar{K}^0 \pi^-$ +1713
- $K^+ K^- K^0 K^- \pi^+$ +1714
- $K^0 \bar{K}^0 K^0 \bar{K}^0 \pi^0$ +1715
- $K^0 \bar{K}^0 \bar{K}^0 K^+ \pi^-$ +1716
- $K^0 \bar{K}^0 K^0 K^- \pi^+$ +1717
- $\phi\phi K^{*0}$ +1718
- $\phi K^+ K^- K^{*0}$ +1719
- $\phi K^0 \bar{K}^0 K^{*0}$ +1720
- $\phi K^0 K^+ K^{*-}$ +1721
- $\phi K^0 K^0 \bar{K}^{*0}$ +1722
- $\phi K^+ K^- K^+ \pi^-$ +1723
- $\phi K^+ K^- K^0 \pi^0$ +1724

- $\phi K^0 \bar{K}^0 K^+ \pi^-$ +1725
- $\phi K^0 \bar{K}^0 K^0 \pi^0$ +1726
- $a_1^0 a_1^0$ +1727
- $a_1^+ a_1^-$ +1728
- $J/\psi K_S^0$ +1729
- $J/\psi K_L^0$ +1730
- $J/\psi K^* S$ +1731
- $J/\psi K^* L$ +1732
- $J/\psi K^{*0} T$ +1733
- $J/\psi \pi^0$ +1734
- $J/\psi \rho^0$ +1735
- $J/\psi \omega$ +1736
- $J/\psi K^0 \pi^0$ +1737
- $J/\psi K^0 \pi^- \pi^+$ +1738
- $J/\psi K_1^0$ +1739
- $J/\psi K_1'^0$ +1740
- $J/\psi K_2^{*0}$ +1741
- $J/\psi K^0 \phi$ +1742
- $J/\psi K^+ \pi^-$ +1743
- $J/\psi \eta K^0$ +1744
- $J/\psi \omega K^0$ +1745
- $J/\psi \eta$ +1746
- $J/\psi \pi^+ \pi^-$ +1747
- $J/\psi f_2$ +1748
- $J/\psi K^+ K^-$ +1749

- $J/\psi \eta'$ +1750
- $J/\psi K^0 K^+ K^-$ +1751
- $J/\psi K^0 \rho^0$ +1752
- $J/\psi K^{*+} \pi^-$ +1753
- $J/\psi \pi^+ \pi^- \pi^+ \pi^-$ +1754
- $J/\psi f_1$ +1755
- $J/\psi K^{*0} \pi^+ \pi^-$ +1756
- $\psi(2S) K_S^0$ +1757
- $\psi(2S) K_L^0$ +1758
- $\psi(2S) K^* S$ +1759
- $\psi(2S) K^* L$ +1760
- $\psi(2S) K^{*0} T$ +1761
- $\psi(2S) K^+ \pi^-$ +1762
- $\psi(2S) K^0 \pi^0$ +1763
- $\psi(2S) K^0 \pi^- \pi^+$ +1764
- $\psi(2S) K^0 \pi^0 \pi^0$ +1765
- $\psi(2S) K^+ \pi^- \pi^0$ +1766
- $\psi(2S) K_1^0$ +1767
- $\psi(2S) \pi^+ \pi^-$ +1768
- $\psi(2S) \pi^0$ +1769
- $\eta_c K_S^0$ +1770
- $\eta_c K_L^0$ +1771
- $K^* S \eta_c$ +1772
- $K^* L \eta_c$ +1773
- $K^{*0} T \eta_c$ +1774

- $\eta_c K^+ \pi^-$ +1775
- $\eta_c K^0 \pi^0$ +1776
- $\eta_c K^0 \pi^- \pi^+$ +1777
- $\eta_c K^0 \pi^0 \pi^0$ +1778
- $\eta_c K^+ \pi^- \pi^0$ +1779
- $\eta_c(2S) K_S^0$ +1780
- $\eta_c(2S) K_L^0$ +1781
- $K^* S \eta_c(2S)$ +1782
- $K^* L \eta_c(2S)$ +1783
- $K^{*0} T \eta_c(2S)$ +1784
- $\eta_c(2S) K^+ \pi^-$ +1785
- $\eta_c(2S) K^0 \pi^0$ +1786
- $\eta_c(2S) K^0 \pi^- \pi^+$ +1787
- $\eta_c(2S) K^0 \pi^0 \pi^0$ +1788
- $\eta_c(2S) K^+ \pi^- \pi^0$ +1789
- $\chi_{c0} K_S^0$ +1790
- $\chi_{c0} K_L^0$ +1791
- $K^* S \chi_{c0}$ +1792
- $K^* L \chi_{c0}$ +1793
- $K^{*0} T \chi_{c0}$ +1794
- $\chi_{c0} K^+ \pi^-$ +1795
- $\chi_{c0} K^0 \pi^0$ +1796
- $\chi_{c0} K^0 \pi^- \pi^+$ +1797
- $\chi_{c0} K^0 \pi^0 \pi^0$ +1798
- $\chi_{c0} K^+ \pi^- \pi^0$ +1799

- $\chi_{c1} K_S^0$ +1800
- $\chi_{c1} K_L^0$ +1801
- $K^* S \chi_{c1}$ +1802
- $K^* L \chi_{c1}$ +1803
- $\chi_{c1} K^{*0} T$ +1804
- $\chi_{c1} K^+ \pi^-$ +1805
- $\chi_{c1} K^0 \pi^0$ +1806
- $\chi_{c1} K^0 \pi^- \pi^+$ +1807
- $\chi_{c1} K^0 \pi^0 \pi^0$ +1808
- $\chi_{c1} K^+ \pi^- \pi^0$ +1809
- $\chi_{c1} \pi^0$ +1810
- $\chi_{c2} K_S^0$ +1811
- $\chi_{c2} K_L^0$ +1812
- $\chi_{c2} K^{*0}$ +1813
- $\chi_{c2} K^+ \pi^-$ +1814
- $\chi_{c2} K^0 \pi^0$ +1815
- $\chi_{c2} K^0 \pi^- \pi^+$ +1816
- $\chi_{c2} K^+ \pi^- \pi^0$ +1817
- $\chi_{c2} K^0 \pi^0 \pi^0$ +1818
- $\psi(377^0) K_S^0$ +1819
- $\psi(377^0) K_L^0$ +1820
- $\psi(377^0) K^* S$ +1821
- $\psi(377^0) K^* L$ +1822
- $\psi(377^0) K^{*0} T$ +1823
- $\psi(377^0) K^0 \pi^0$ +1824

- $\psi(377^0) K^0 \pi^- \pi^+$ +1825
- $\psi(377^0) K^0 \pi^0 \pi^0$ +1826
- $\psi(377^0) K^+ \pi^- \pi^0$ +1827
- $\psi(377^0) K_1^0$ +1828
- $D^- D^+$ +1829
- $D^{*-} D^+$ +1830
- $D^{*+} D^-$ +1831
- $D^{*-} D^{*+}$ +1832
- $D^- D_s^+$ +1833
- $D^{*-} D_s^+$ +1834
- $D_s^{*+} D^-$ +1835
- $D_s^{*+} D^{*-}$ +1836
- $D_1'^- D_s^+$ +1837
- $D_1'^- D_s^{*+}$ +1838
- $D_1^- D_s^+$ +1839
- $D_1^- D_s^{*+}$ +1840
- $D_2^{*-} D_s^+$ +1841
- $D_2^{*-} D_s^{*+}$ +1842
- $D_s^+ D^- \pi^0$ +1843
- $D_s^+ \bar{D}^0 \pi^-$ +1844
- $D_s^{*+} D^- \pi^0$ +1845
- $D_s^{*+} \bar{D}^0 \pi^-$ +1846
- $D_s^+ D^- \pi^- \pi^+$ +1847
- $D_s^+ D^- \pi^0 \pi^0$ +1848
- $D_s^+ \bar{D}^0 \pi^- \pi^0$ +1849

- $D_s^{*+} D^- \pi^- \pi^+$ +1850
- $D_s^{*+} D^- \pi^0 \pi^0$ +1851
- $D_s^{*+} \bar{D}^0 \pi^- \pi^0$ +1852
- $D^- D^0 K^+$ +1853
- $D^- D^{*0} K^+$ +1854
- $D^{*-} D^0 K^+$ +1855
- $D^{*-} D^{*0} K^+$ +1856
- $D^- D^+ K^0$ +1857
- $D^{*-} D^+ K^0$ +1858
- $D^- D^{*+} K^0$ +1859
- $D^{*-} D^{*+} K^0$ +1860
- $D^0 \bar{D}^0 K^0$ +1861
- $D^{*0} \bar{D}^0 K^0$ +1862
- $D^0 \bar{D}^{*0} K^0$ +1863
- $D^{*0} \bar{D}^{*0} K^0$ +1864
- $D^- D^0 K^{*+}$ +1865
- $D^{*-} D^0 K^{*+}$ +1866
- $D^- D^{*0} K^{*+}$ +1867
- $D^{*-} D^{*0} K^{*+}$ +1868
- $D^- D^+ K^{*0}$ +1869
- $D^{*-} D^+ K^{*0}$ +1870
- $D^- D^{*+} K^{*0}$ +1871
- $D^{*-} D^{*+} K^{*0}$ +1872
- $D^0 \bar{D}^0 K^{*0}$ +1873
- $D^0 \bar{D}^{*0} K^{*0}$ +1874

- $D^{*0}\bar{D}^0 K^{*0}$ +1875
- $D^{*0}\bar{D}^{*0}K^{*0}$ +1876
- $D^{*-}\pi^+$ +1877
- $D^-\pi^+$ +1878
- $\rho^+ D^-$ +1879
- $\rho^+ D^{*-}$ +1880
- $D^-\pi^+\pi^0$ +1881
- $D^{*-}\pi^+\pi^0$ +1882
- $\bar{D}^0\pi^-\pi^+$ +1883
- $\bar{D}^{*0}\pi^-\pi^+$ +1884
- $\bar{D}^{*0}\pi^0\pi^0$ +1885
- $a_1^+ D^-$ +1886
- $D^-\rho^0\pi^+$ +1887
- $D^-\rho^+\pi^0$ +1888
- $D^-\pi^-\pi^+\pi^+$ +1889
- $D^-\pi^0\pi^+\pi^0$ +1890
- $\bar{D}^0\pi^-\pi^+\pi^0$ +1891
- $\bar{D}^0\pi^0\pi^0\pi^0$ +1892
- $D^{*-}a_1^+$ +1893
- $D^{*-}\rho^0\pi^+$ +1894
- $D^{*-}\rho^+\pi^0$ +1895
- $D^{*-}\pi^-\pi^+\pi^+$ +1896
- $D^{*-}\pi^0\pi^+\pi^0$ +1897
- $\bar{D}^{*0}\pi^-\pi^+\pi^0$ +1898
- $\bar{D}^{*0}\pi^0\pi^0\pi^0$ +1899

- $D_1^-\pi^+$ +1900
- $D_1'^-\pi^+$ +1901
- $D_0^{*-}\pi^+$ +1902
- $D_2^{*-}\pi^+$ +1903
- $D_1^-\rho^+$ +1904
- $D_1'^-\rho^+$ +1905
- $D_2^{*-}\rho^+$ +1906
- $D^{*-}K^+$ +1907
- D^-K^+ +1908
- $D^{*-}K^{*+}$ +1909
- $K^{*+}D^-$ +1910
- $\bar{D}^{*0}\bar{K}^0$ +1911
- $\bar{D}^0\bar{K}^0$ +1912
- $K^{*0}\bar{D}^0$ +1913
- $K^{*0}D^0$ +1914
- $\bar{D}^{*0}K^{*0}$ +1915
- $D^{*0}K^{*0}$ +1916
- $\bar{D}^0\pi^0$ +1917
- $\bar{D}^{*0}\pi^0$ +1918
- $\rho^0\bar{D}^0$ +1919
- $\bar{D}^{*0}\rho^0$ +1920
- $\bar{D}^0\eta$ +1921
- $\bar{D}^{*0}\eta$ +1922
- $\bar{D}^0\eta'$ +1923
- $\bar{D}^{*0}\eta'$ +1924

- $\omega\bar{D}^0$ +1925
- $\bar{D}^{*0}\omega$ +1926
- $p^+\bar{p}^-$ +1927
- $D_{s0}^{*+}D^-$ +1928
- $D^{*-}D_{s0}^{*+}$ +1929
- $D_{s1}^+D^-$ +1930
- $D^{*-}D_{s1}^+$ +1931
- $D^-K^+\bar{K}^{*0}$ +1932
- $D^{*-}K^+\bar{K}^{*0}$ +1933
- $D^{*-}K^0\pi^+$ +1934
- $D^{*+}K^0\pi^-$ +1935
- $D^-K^0\pi^+$ +1936
- $D^-\omega\pi^+$ +1937
- $D^{*-}\omega\pi^+$ +1938
- $D_{s1}'^+D^-$ +1939
- $D_{s1}'^+D^{*-}$ +1940
- $\bar{c}d_0 ud_0$ +1941
- $\bar{c}d_1 ud_1$ +1942
- $\bar{c}s_0 ud_0$ +1943
- $\bar{c}s_1 ud_1$ +1944
- $u\bar{d}\bar{c}d$ +1945
- $u\bar{d}\bar{c}d$ +1946
- $u\bar{s}\bar{c}d$ +1947
- $u\bar{c}\bar{d}d$ +1948
- $u\bar{c}\bar{s}d$ +1949

- $c\bar{s}\bar{c}d$ +1950
- $c\bar{d}\bar{c}d$ +1951
- $u d\bar{u}d$ +1952
- $c\bar{s}\bar{u}d$ +1953
- $u\bar{u}\bar{d}d$ +1954
- $d\bar{d}\bar{d}d$ +1955
- $s\bar{s}\bar{d}d$ +1956
- $u\bar{u}\bar{s}d$ +1957
- $d\bar{d}\bar{s}d$ +1958
- $s\bar{s}\bar{s}d$ +1959
- $\bar{s}d$ +1960
- $\bar{D}^0 K^0$ +1961
- $\bar{D}^0 K^+\pi^-$ +1962
- $D^0 K^+\pi^-$ +1963
- $\bar{D}^{*0} K^0$ +1964
- $D^{*0}\pi^+\pi^+\pi^-\pi^-$ +1965
- $\eta_c K^0$ +1966

- $K^0 D^0 \bar{D}^0 \pi^0$ +1967
- $\psi(2S) K^0$ +1968
- $\chi_{c0} K^0$ +1969
- $\chi_{c1} K^0$ +1970
- $\chi_{c1} K^-\pi^+$ +1971
- $K^0 \rho^0$ +1972
- ηK_0^{*0} +1973
- ηK_2^{*0} +1974
- ωK_0^{*0} +1975
- ωK_2^{*0} +1976
- $f_2 K^0$ +1977
- $f_0 K^+\pi^-$ +1978
- $K_2^{*0}\phi$ +1979
- $\eta K^0\gamma$ +1980
- $p^+\bar{p}^- K^0$ +1981
- $p^+\bar{p}^- K^{*0}$ +1982
- $p^+\bar{\Lambda}^0\pi^-$ +1983

- $\bar{\Lambda}^0\Lambda^0 K^0$ +1984
- $\bar{\Lambda}^0\Lambda^0 K^{*0}$ +1985
- $\bar{\Lambda}^0\Lambda^0 D^0$ +1986
- $\bar{D}^0 p^+\bar{p}^-$ +1987
- $D_s^- \bar{\Lambda}^0 p^+$ +1988
- $\bar{D}^{*0} p^+\bar{p}^-$ +1989
- $D^{*-} p^+\bar{n}^0$ +1990
- $D^- p^+\bar{p}^-\pi^+$ +1991
- $D^{*-} p^+\bar{p}^-\pi^+$ +1992
- $\bar{\Lambda}_c^- p^+$ +1993
- $\bar{\Lambda}_c^- p^+\pi^+\pi^-$ +1994
- $\bar{\Sigma}_c^{*--} p^+\pi^+$ +1995
- $\bar{\Sigma}_{c0} p^+\pi^-$ +1996
- $\bar{\Sigma}_c^{--} p^+\pi^+$ +1997
- $D^{*-}\pi^+\pi^+\pi^-\pi^0$ +1998
- $D^{*-}\pi^+\pi^+\pi^+\pi^-\pi^-$ +1999
- $D_s^-\pi^+ K^0$ +2000

D   List of tag numbers for $\bar{B}^0$ decays

Tag numbers for the 1000 $\bar{B}^0$ decays are following.

- $D^{*+}e^-\bar{\nu}_e$ -1001
- $D^+e^-\bar{\nu}_e$ -1002
- $D_1^+e^-\bar{\nu}_e$ -1003
- $D_0^{*+}e^-\bar{\nu}_e$ -1004
- $D_1'^+e^-\bar{\nu}_e$ -1005
- $D_2^{*+}e^-\bar{\nu}_e$ -1006

- $D^{*0}\pi^+e^-\bar{\nu}_e$ -1007
- $D^{*+}\pi^0e^-\bar{\nu}_e$ -1008
- $D^0\pi^+e^-\bar{\nu}_e$ -1009
- $D^+\pi^0e^-\bar{\nu}_e$ -1010
- $D^+\pi^+\pi^-e^-\bar{\nu}_e$ -1011
- $D^0\pi^+\pi^0e^-\bar{\nu}_e$ -1012

- $D^+\pi^0\pi^0e^-\bar{\nu}_e$ -1013
- $D^{*+}\pi^+\pi^-e^-\bar{\nu}_e$ -1014
- $D^{*0}\pi^+\pi^0e^-\bar{\nu}_e$ -1015
- $D^{*+}\pi^0\pi^0e^-\bar{\nu}_e$ -1016
- $D^+\eta e^-\bar{\nu}_e$ -1017
- $D^{*+}\eta e^-\bar{\nu}_e$ -1018

- $D^{*+}\mu^-\bar{\nu}_\mu$ -1019
- $D^+\mu^-\bar{\nu}_\mu$ -1020
- $D_1^+\mu^-\bar{\nu}_\mu$ -1021
- $D_0^{*+}\mu^-\bar{\nu}_\mu$ -1022
- $D_1'^+\mu^-\bar{\nu}_\mu$ -1023
- $D_2^{*+}\mu^-\bar{\nu}_\mu$ -1024
- $D^{*0}\pi^+\mu^-\bar{\nu}_\mu$ -1025
- $D^{*+}\pi^0\mu^-\bar{\nu}_\mu$ -1026
- $D^0\pi^+\mu^-\bar{\nu}_\mu$ -1027
- $D^+\pi^0\mu^-\bar{\nu}_\mu$ -1028
- $D^+\pi^+\pi^-\mu^-\bar{\nu}_\mu$ -1029
- $D^0\pi^+\pi^0\mu^-\bar{\nu}_\mu$ -1030
- $D^+\pi^0\pi^0\mu^-\bar{\nu}_\mu$ -1031
- $D^{*+}\pi^+\pi^-\mu^-\bar{\nu}_\mu$ -1032
- $D^{*0}\pi^+\pi^0\mu^-\bar{\nu}_\mu$ -1033
- $D^{*+}\pi^0\pi^0\mu^-\bar{\nu}_\mu$ -1034
- $D^+\eta\mu^-\bar{\nu}_\mu$ -1035
- $D^{*+}\eta\mu^-\bar{\nu}_\mu$ -1036
- $D^{*+}\tau^-\bar{\nu}_\tau$ -1037
- $D^+\tau^-\bar{\nu}_\tau$ -1038
- $D_1^+\tau^-\bar{\nu}_\tau$ -1039
- $D_0^{*+}\tau^-\bar{\nu}_\tau$ -1040
- $D_1'^+\tau^-\bar{\nu}_\tau$ -1041
- $D_2^{*+}\tau^-\bar{\nu}_\tau$ -1042
- $\pi^+e^-\bar{\nu}_e$ -1043

- $\rho^+e^-\bar{\nu}_e$ -1044
- $D(2S)^+e^-\bar{\nu}_e$ -1045
- $D^*(2S)^+e^-\bar{\nu}_e$ -1046
- $Xu^+e^-\bar{\nu}_e$ -1047
- $\pi^+\mu^-\bar{\nu}_\mu$ -1048
- $\rho^+\mu^-\bar{\nu}_\mu$ -1049
- $D(2S)^+\mu^-\bar{\nu}_\mu$ -1050
- $D^*(2S)^+\mu^-\bar{\nu}_\mu$ -1051
- $Xu^+\mu^-\bar{\nu}_\mu$ -1052
- $\pi^+\tau^-\bar{\nu}_\tau$ -1053
- $\rho^+\tau^-\bar{\nu}_\tau$ -1054
- $a_1^+\tau^-\bar{\nu}_\tau$ -1055
- $b_1^+\tau^-\bar{\nu}_\tau$ -1056
- $a_0^+\tau^-\bar{\nu}_\tau$ -1057
- $a_2^+\tau^-\bar{\nu}_\tau$ -1058
- $\rho(2S)^+\tau^-\bar{\nu}_\tau$ -1059
- $D(2S)^+\tau^-\bar{\nu}_\tau$ -1060
- $D^*(2S)^+\tau^-\bar{\nu}_\tau$ -1061
- $D_s^-\pi^+$ -1062
- $D_s^+K^-$ -1063
- $D_s^{*-}\pi^+$ -1064
- $D_s^{*+}K^-$ -1065
- $\rho^+D_s^-$ -1066
- $K^{*-}D_s^+$ -1067
- $D_s^{*-}\rho^+$ -1068

- $D_s^{*+}K^{*-}$ -1069
- $\bar{K}^{*0}\gamma$ -1070
- $\omega\gamma$ -1071
- $\rho^0\gamma$ -1072
- $\bar{K}_1^0\gamma$ -1073
- $\bar{K}_1'^0\gamma$ -1074
- $\bar{K}_2^{*0}\gamma$ -1075
- $\bar{K}''^{*0}\gamma$ -1076
- $\bar{X}sd\gamma$ -1077
- $\bar{K}^0e^+e^-$ -1078
- $\bar{K}^{*0}e^+e^-$ -1079
- $\bar{X}sde^+e^-$ -1080
- $\pi^+\pi^-e^+e^-$ -1081
- $\bar{K}^0\mu^+\mu^-$ -1082
- $\bar{K}^{*0}\mu^+\mu^-$ -1083
- $\pi^+\pi^-\mu^+\mu^-$ -1084
- $\bar{X}sd\mu^+\mu^-$ -1085
- $\bar{K}^0\tau^+\tau^-$ -1086
- $\bar{K}^{*0}\tau^+\tau^-$ -1087
- $\bar{X}sd\tau^+\tau^-$ -1088
- $\pi^+\pi^-$ -1089
- $\pi^0\pi^0$ -1090
- $\pi^0\eta$ -1091
- $\pi^0\eta'$ -1092
- $\pi^0a_0^0$ -1093

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- $\pi^0 f_0$ -1094
- $\pi^0 \omega$ -1095
- $\pi^0 a_1^0$ -1096
- $\pi^0 b_1^0$ -1097
- $\eta\eta$ -1098
- $\eta\eta'$ -1099
- ηa_0^0 -1100
- ηf_0 -1101
- $\eta\rho^0$ -1102
- $\eta\omega$ -1103
- ηa_1^0 -1104
- ηb_1^0 -1105
- $\eta'\eta'$ -1106
- $\eta' a_0^0$ -1107
- $\eta' f_0$ -1108
- $\eta'\rho^0$ -1109
- $\eta'\omega$ -1110
- $\eta' a_1^0$ -1111
- $\eta' b_1^0$ -1112
- $a_0^0 a_0^0$ -1113
- $a_0^0 f_0$ -1114
- $a_0^0 \rho^0$ -1115
- $a_0^0 \omega$ -1116
- $a_0^0 a_1^0$ -1117
- $a_0^0 b_1^0$ -1118

- $f_0 f_0$ -1119
- $f_0 \rho^0$ -1120
- $f_0 \omega$ -1121
- $f_0 a_1^0$ -1122
- $f_0 b_1^0$ -1123
- ϕK_S^0 -1124
- ϕK_L^0 -1125
- ηK_S^0 -1126
- ηK_L^0 -1127
- $\eta' K_S^0$ -1128
- $\eta' K_L^0$ -1129
- ωK_S^0 -1130
- ωK_L^0 -1131
- ϕK^0 -1132
- $\phi \bar{K}^0$ -1133
- ηK^0 -1134
- $\eta \bar{K}^0$ -1135
- $\eta' K^0$ -1136
- $\eta' \bar{K}^0$ -1137
- ωK^0 -1138
- $\omega \bar{K}^0$ -1139
- $\phi \pi^0$ -1140
- $\phi \eta$ -1141
- $\phi \eta'$ -1142
- $\bar{K}^{*0} \eta$ -1143

- $\bar{K}^{*0} \eta'$ -1144
- $\bar{K}^{*0} \omega$ -1145
- $\phi \omega$ -1146
- $\omega \omega$ -1147
- $\omega \rho^0$ -1148
- $K^- \pi^+$ -1149
- $K^+ K^-$ -1150
- $K_S^0 K_S^0$ -1151
- $K_S^0 K_L^0$ -1152
- $K_L^0 K_L^0$ -1153
- $\bar{K}^0 \pi^0$ -1154
- $K_S^0 \pi^0$ -1155
- $K_L^0 \pi^0$ -1156
- $K^0 \bar{K}^0$ -1157
- $\pi^- \pi^+ \pi^0$ -1158
- $\pi^0 \rho^0$ -1159
- $\rho^- \pi^+$ -1160
- $\rho^+ \pi^-$ -1161
- $\rho(2S)^- \pi^+$ -1162
- $\rho(2S)^+ \pi^-$ -1163
- $\rho(3S)^- \pi^+$ -1164
- $\rho(3S)^+ \pi^-$ -1165
- $\rho^0 K_S^0$ -1166
- $\rho^0 K_L^0$ -1167
- $\rho^+ K^-$ -1168

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- $\rho(2S)^0 K_S^0$ -1169
- $\rho(2S)^0 K_L^0$ -1170
- $f_0 \bar{K}^0$ -1171
- $a_0^0 \bar{K}^0$ -1172
- $a_0^+ K^-$ -1173
- $a_0^+ \pi^-$ -1174
- $a_0^- \pi^+$ -1175
- $\bar{K}^{*0} \pi^0$ -1176
- $\bar{K}^{*0} K^0$ -1177
- $\bar{K}_0^{*0} \pi^0$ -1178
- $\bar{K}_0^{*0} K^0$ -1179
- $\bar{K}''^{*0} \pi^0$ -1180
- $\bar{K}''^{*0} K^0$ -1181
- $K^{*-} \pi^+$ -1182
- $K^{*-} K^+$ -1183
- $K_0^{*-} \pi^+$ -1184
- $K_0^{*-} K^+$ -1185
- $K''^{*-} \pi^+$ -1186
- $K''^{*-} K^+$ -1187
- $\pi^- \pi^+ \eta$ -1188
- $\pi^- \pi^+ \eta'$ -1189
- $\pi^- \pi^+ \bar{K}^0$ -1190
- $K^- \pi^+ \pi^0$ -1191
- $K^- \pi^+ \eta$ -1192
- $K^- \pi^+ \eta'$ -1193

- $\pi^- K^+ \bar{K}^0$ -1194
- $\pi^+ K^- K^0$ -1195
- $K^- K^+ \bar{K}^0$ -1196
- $K^- K^+ K_S^0$ -1197
- $K^- K^+ K_L^0$ -1198
- $K^- K^+ \pi^0$ -1199
- $K^- K^+ \eta$ -1200
- $K^- K^+ \eta'$ -1201
- $\bar{K}^0 K^0 \pi^0$ -1202
- $\bar{K}^0 K^0 \eta$ -1203
- $\bar{K}^0 K^0 \eta'$ -1204
- $\bar{K}^0 \pi^0 \pi^0$ -1205
- $\bar{K}^0 \pi^0 \eta$ -1206
- $\bar{K}^0 \pi^0 \eta'$ -1207
- $\bar{K}^0 \eta \eta$ -1208
- $\bar{K}^0 \eta \eta'$ -1209
- $\bar{K}^0 \eta' \eta'$ -1210
- $\bar{K}^0 K^0 \bar{K}^0$ -1211
- $\pi^0 \pi^0 \pi^0$ -1212
- $\pi^0 \pi^0 \eta$ -1213
- $\pi^0 \pi^0 \eta'$ -1214
- $\pi^0 \eta \eta$ -1215
- $\pi^0 \eta \eta'$ -1216
- $\bar{K}^{*0} \pi^0 \pi^0$ -1217
- $\rho^0 \rho^0$ -1218

- $\rho^+ \rho^-$ -1219
- $\rho^0 \pi^+ \pi^-$ -1220
- $\omega \pi^+ \pi^-$ -1221
- $\rho^0 \pi^0 \pi^0$ -1222
- $\omega \pi^0 \pi^0$ -1223
- $\rho^0 \pi^0 \eta$ -1224
- $\rho^0 \eta \eta$ -1225
- $\rho^0 \pi^0 \eta'$ -1226
- $\rho^0 \eta \eta'$ -1227
- $\omega \pi^0 \eta$ -1228
- $\omega \eta \eta$ -1229
- $\omega \pi^0 \eta'$ -1230
- $\omega \eta \eta'$ -1231
- $\rho^+ \pi^- \pi^0$ -1232
- $\rho^+ \pi^- \eta$ -1233
- $\rho^- \pi^+ \pi^0$ -1234
- $\rho^- \pi^+ \eta$ -1235
- $\pi^+ \pi^- \pi^+ \pi^-$ -1236
- $\pi^+ \pi^- \pi^0 \pi^0$ -1237
- $\pi^+ \pi^- \eta \pi^0$ -1238
- $\pi^+ \pi^- \eta \eta$ -1239
- $\pi^+ \pi^- \eta' \pi^0$ -1240
- $\pi^+ \pi^- \eta' \eta$ -1241
- $a_1^+ \pi^-$ -1242
- $a_1^- \pi^+$ -1243

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- $b_1^+ \pi^-$ -1244
- $b_1^- \pi^+$ -1245
- $\rho^- a_0^+$ -1246
- $\rho^+ a_0^-$ -1247
- $f_0 \pi^+ \pi^-$ -1248
- $f_0 \pi^0 \pi^0$ -1249
- $a_0^- \pi^+ \pi^0$ -1250
- $a_0^0 \pi^0 \pi^0$ -1251
- $a_0^+ \pi^- \pi^0$ -1252
- $\rho^0 \bar{K}^{*0}$ -1253
- $\rho^+ K^{*-}$ -1254
- $\pi^- \pi^+ \bar{K}^{*0}$ -1255
- $\pi^+ \pi^0 K^{*-}$ -1256
- $\pi^+ \eta K^{*-}$ -1257
- $\pi^+ \eta' K^{*-}$ -1258
- $\rho^+ K^- \pi^0$ -1259
- $\rho^+ K^- \eta$ -1260
- $\rho^+ K^- \eta'$ -1261
- $\rho^+ \bar{K}^0 \pi^-$ -1262
- $\rho^- \bar{K}^0 \pi^+$ -1263
- $\rho^0 \bar{K}^0 \pi^0$ -1264
- $\rho^0 \bar{K}^0 \eta$ -1265
- $\rho^0 \bar{K}^0 \eta'$ -1266
- $\rho^0 K^- \pi^+$ -1267
- $\omega \bar{K}^0 \pi^0$ -1268

- $\omega \bar{K}^0 \eta$ -1269
- $\omega \bar{K}^0 \eta'$ -1270
- $\omega K^- \pi^+$ -1271
- $\pi^+ \pi^0 \pi^- \bar{K}^0$ -1272
- $\pi^+ \eta \pi^- \bar{K}^0$ -1273
- $\pi^0 \pi^0 \pi^0 \bar{K}^0$ -1274
- $\pi^0 \pi^0 \eta \bar{K}^0$ -1275
- $\pi^0 \eta \eta \bar{K}^0$ -1276
- $\pi^0 \pi^0 \eta' \bar{K}^0$ -1277
- $\pi^0 \eta \eta' \bar{K}^0$ -1278
- $\pi^+ \pi^- \pi^+ K^-$ -1279
- $\pi^0 \pi^0 \pi^+ K^-$ -1280
- $\pi^0 \eta \pi^+ K^-$ -1281
- $\eta \eta \pi^+ K^-$ -1282
- $\pi^0 \eta' \pi^+ K^-$ -1283
- $\eta \eta' \pi^+ K^-$ -1284
- $\rho^0 \bar{K}_0^{*0}$ -1285
- $\rho^+ K_0^{*-}$ -1286
- $\pi^- \pi^+ \bar{K}_0^{*0}$ -1287
- $\pi^0 \pi^0 \bar{K}_0^{*0}$ -1288
- $\pi^+ \pi^0 K_0^{*-}$ -1289
- $\bar{K}^{*0} f_0$ -1290
- $a_1^0 \bar{K}^0$ -1291
- $a_1^+ K^-$ -1292
- $b_1^0 \bar{K}^0$ -1293

- $b_1^+ K^-$ -1294
- $\bar{K}^{*0} a_0^0$ -1295
- $K^{*-} a_0^+$ -1296
- $K^{*0} \bar{K}^{*0}$ -1297
- $K^{*+} K^{*-}$ -1298
- $\phi \rho^0$ -1299
- $\phi \pi^- \pi^+$ -1300
- $K^+ K^- \rho^0$ -1301
- $K^0 \bar{K}^0 \rho^0$ -1302
- $K^+ K^- \omega$ -1303
- $K^0 \bar{K}^0 \omega$ -1304
- $K^+ \bar{K}^0 \rho^-$ -1305
- $K^- K^0 \rho^+$ -1306
- $K^+ K^- \pi^- \pi^+$ -1307
- $K^+ K^- \pi^0 \pi^0$ -1308
- $K^+ K^- \pi^0 \eta$ -1309
- $K^+ K^- \eta \eta$ -1310
- $K^+ K^- \pi^0 \eta'$ -1311
- $K^+ K^- \eta \eta'$ -1312
- $K^0 \bar{K}^0 \pi^- \pi^+$ -1313
- $K^0 \bar{K}^0 \pi^0 \pi^0$ -1314
- $K^0 \bar{K}^0 \pi^0 \eta$ -1315
- $K^0 \bar{K}^0 \eta \eta$ -1316
- $K^0 \bar{K}^0 \pi^0 \eta'$ -1317
- $K^0 \bar{K}^0 \eta \eta'$ -1318

- $K^{*+}K^-\pi^0$ -1319
- $K^{*-}K^+\pi^0$ -1320
- $K^{*0}\bar{K}^0\pi^0$ -1321
- $K^0\bar{K}^{*0}\pi^0$ -1322
- $K^+\bar{K}^{*0}\pi^-$ -1323
- $K^{*+}\bar{K}^0\pi^-$ -1324
- $K^-K^{*0}\pi^+$ -1325
- $K^{*-}K^0\pi^+$ -1326
- $\phi\bar{K}^{*0}$ -1327
- $\phi K^-\pi^+$ -1328
- $\phi\bar{K}^0\pi^0$ -1329
- $\phi\bar{K}^0\eta$ -1330
- $K^-K^+\bar{K}^{*0}$ -1331
- $K^-K^{*+}\bar{K}^0$ -1332
- $K^{*-}K^+\bar{K}^0$ -1333
- $K^+K^-K^-\pi^+$ -1334
- $K^+K^-\bar{K}^0\pi^0$ -1335
- $K^+K^-\bar{K}^0\eta$ -1336
- $K^0\bar{K}^0\bar{K}^0\pi^0$ -1337
- $K^0\bar{K}^0\bar{K}^0\eta$ -1338
- $\phi\bar{K}_0^{*0}$ -1339
- $K^-K^+\bar{K}_0^{*0}$ -1340
- $K^-K_0^{*+}\bar{K}^0$ -1341
- $K_0^{*-}K^+\bar{K}^0$ -1342
- $\phi\bar{K}'^0_1$ -1343

- $K^-K^+\bar{K}'^0_1$ -1344
- $\phi\phi$ -1345
- ϕK^+K^- -1346
- $\phi K^0\bar{K}^0$ -1347
- $K^+K^-K^+K^-$ -1348
- $K^0\bar{K}^0K^+K^-$ -1349
- $K^0\bar{K}^0K^0\bar{K}^0$ -1350
- $\rho^0\rho^0\pi^0$ -1351
- $\rho^0\rho^0\eta$ -1352
- $\rho^0\rho^0\eta'$ -1353
- $\omega\rho^0\pi^0$ -1354
- $\omega\rho^0\eta$ -1355
- $\omega\rho^0\eta'$ -1356
- $\rho^+\rho^-\pi^0$ -1357
- $\rho^+\rho^-\eta$ -1358
- $\rho^+\rho^-\eta'$ -1359
- $\rho^0\rho^+\pi^-$ -1360
- $\omega\rho^+\pi^-$ -1361
- $\rho^0\pi^+\pi^-\pi^0$ -1362
- $\rho^0\pi^+\pi^-\eta$ -1363
- $\rho^0\pi^+\pi^-\eta'$ -1364
- $\rho^0\pi^0\pi^0\pi^0$ -1365
- $\rho^0\pi^0\eta\pi^0$ -1366
- $\rho^0\pi^0\eta'\pi^0$ -1367
- $\omega\pi^+\pi^-\pi^0$ -1368

- $\omega\pi^+\pi^-\eta$ -1369
- $\omega\pi^+\pi^-\eta'$ -1370
- $\omega\pi^0\pi^0\pi^0$ -1371
- $\omega\pi^0\eta\pi^0$ -1372
- $\omega\pi^0\eta'\pi^0$ -1373
- $\rho^+\pi^-\pi^+\pi^-$ -1374
- $\rho^+\pi^-\pi^0\pi^0$ -1375
- $\rho^+\pi^-\pi^0\eta$ -1376
- $\rho^+\pi^-\pi^0\eta'$ -1377
- $\rho^-\pi^+\pi^+\pi^-$ -1378
- $\rho^-\pi^+\pi^0\pi^0$ -1379
- $\rho^-\pi^+\pi^0\eta$ -1380
- $\rho^-\pi^+\pi^0\eta'$ -1381
- $\pi^+\pi^-\pi^+\pi^-\pi^0$ -1382
- $\pi^+\pi^-\pi^+\pi^-\eta$ -1383
- $\pi^+\pi^-\pi^+\pi^-\eta'$ -1384
- $\pi^+\pi^-\pi^0\pi^0\pi^0$ -1385
- $\pi^+\pi^-\pi^0\pi^0\eta$ -1386
- $\pi^+\pi^-\pi^0\pi^0\eta'$ -1387
- $\pi^0\pi^0\pi^0\pi^0\pi^0$ -1388
- $\pi^0\pi^0\pi^0\pi^0\eta$ -1389
- $\pi^0\pi^0\pi^0\pi^0\eta'$ -1390
- $a_1^+\rho^-$ -1391
- $a_1^-\rho^+$ -1392
- $a_1^0\rho^0$ -1393

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- $a_1^0 \omega$ -1394
- $a_1^+ \pi^- \pi^0$ -1395
- $a_1^+ \pi^- \eta$ -1396
- $a_1^+ \pi^- \eta'$ -1397
- $a_1^0 \pi^+ \pi^-$ -1398
- $a_1^0 \pi^0 \pi^0$ -1399
- $a_1^0 \pi^0 \eta$ -1400
- $a_1^0 \pi^0 \eta'$ -1401
- $a_1^- \pi^+ \pi^0$ -1402
- $a_1^- \pi^+ \eta$ -1403
- $a_1^- \pi^+ \eta'$ -1404
- $\rho^+ f_0 \pi^-$ -1405
- $\rho^- f_0 \pi^+$ -1406
- $\rho^0 f_0 \pi^0$ -1407
- $\rho^0 f_0 \eta$ -1408
- $\rho^0 f_0 \eta'$ -1409
- $\omega f_0 \pi^0$ -1410
- $\rho^+ a_0^0 \pi^-$ -1411
- $\rho^+ a_0^- \pi^0$ -1412
- $\rho^+ a_0^- \eta$ -1413
- $\rho^+ a_0^- \eta'$ -1414
- $\rho^0 a_0^+ \pi^-$ -1415
- $\rho^0 a_0^- \pi^+$ -1416
- $\rho^0 a_0^0 \pi^0$ -1417
- $\rho^0 a_0^0 \eta$ -1418

- $\rho^0 a_0^0 \eta'$ -1419
- $\rho^- a_0^0 \pi^+$ -1420
- $\rho^- a_0^+ \pi^0$ -1421
- $\rho^- a_0^+ \eta$ -1422
- $\rho^- a_0^+ \eta'$ -1423
- $f_0 \pi^+ \pi^- \pi^0$ -1424
- $f_0 \pi^+ \pi^- \eta$ -1425
- $f_0 \pi^+ \pi^- \eta'$ -1426
- $f_0 \pi^0 \pi^0 \pi^0$ -1427
- $f_0 \pi^0 \pi^0 \eta$ -1428
- $f_0 \pi^0 \pi^0 \eta'$ -1429
- $a_0^0 \pi^+ \pi^- \pi^0$ -1430
- $a_0^0 \pi^0 \pi^0 \pi^0$ -1431
- $a_0^+ \pi^- \pi^+ \pi^-$ -1432
- $a_0^+ \pi^- \pi^0 \pi^0$ -1433
- $a_0^- \pi^+ \pi^+ \pi^-$ -1434
- $a_0^- \pi^+ \pi^0 \pi^0$ -1435
- $\rho^0 K^{*-} \pi^+$ -1436
- $\rho^+ K^{*-} \pi^0$ -1437
- $\rho^+ K^{*-} \eta$ -1438
- $\rho^+ K^{*-} \eta'$ -1439
- $\rho^0 \bar{K}^{*0} \pi^0$ -1440
- $\rho^0 \bar{K}^{*0} \eta$ -1441
- $\rho^0 \bar{K}^{*0} \eta'$ -1442
- $\rho^- \bar{K}^{*0} \pi^+$ -1443

- $\rho^+ \bar{K}^{*0} \pi^-$ -1444
- $\omega K^{*-} \pi^+$ -1445
- $\omega \bar{K}^{*0} \pi^0$ -1446
- $\omega \bar{K}^{*0} \eta$ -1447
- $\omega \bar{K}^{*0} \eta'$ -1448
- $\pi^+ \pi^- K^{*-} \pi^+$ -1449
- $\pi^+ \pi^0 K^{*-} \pi^0$ -1450
- $\pi^+ \pi^0 K^{*-} \eta$ -1451
- $\pi^+ \pi^0 K^{*-} \eta'$ -1452
- $\pi^+ \pi^- \bar{K}^{*0} \pi^0$ -1453
- $\pi^+ \pi^- \bar{K}^{*0} \eta$ -1454
- $\pi^+ \pi^- \bar{K}^{*0} \eta'$ -1455
- $\pi^0 \pi^0 \bar{K}^{*0} \pi^0$ -1456
- $\pi^0 \pi^0 \bar{K}^{*0} \eta$ -1457
- $\pi^0 \pi^0 \bar{K}^{*0} \eta'$ -1458
- $\rho^- K^- \pi^+ \pi^+$ -1459
- $\rho^0 K^- \pi^+ \pi^0$ -1460
- $\rho^0 K^- \pi^+ \eta$ -1461
- $\rho^0 K^- \pi^+ \eta'$ -1462
- $\rho^+ K^- \pi^+ \pi^-$ -1463
- $\rho^+ K^- \pi^0 \pi^0$ -1464
- $\rho^+ K^- \pi^0 \eta$ -1465
- $\rho^+ K^- \pi^0 \eta'$ -1466
- $\rho^0 \bar{K}^0 \pi^+ \pi^-$ -1467
- $\rho^0 \bar{K}^0 \pi^0 \pi^0$ -1468

- $\rho^0 \bar{K}^0 \pi^0 \eta$ $\quad$ -1469
- $\rho^0 \bar{K}^0 \pi^0 \eta'$ $\quad$ -1470
- $\rho^- \bar{K}^0 \pi^+ \pi^0$ $\quad$ -1471
- $\rho^- \bar{K}^0 \pi^+ \eta$ $\quad$ -1472
- $\rho^- \bar{K}^0 \pi^+ \eta'$ $\quad$ -1473
- $\rho^+ \bar{K}^0 \pi^- \pi^0$ $\quad$ -1474
- $\rho^+ \bar{K}^0 \pi^- \eta$ $\quad$ -1475
- $\rho^+ \bar{K}^0 \pi^- \eta'$ $\quad$ -1476
- $\omega K^- \pi^+ \pi^0$ $\quad$ -1477
- $\omega K^- \pi^+ \eta$ $\quad$ -1478
- $\omega K^- \pi^+ \eta'$ $\quad$ -1479
- $\omega \bar{K}^0 \pi^+ \pi^-$ $\quad$ -1480
- $\omega \bar{K}^0 \pi^0 \pi^0$ $\quad$ -1481
- $\omega \bar{K}^0 \pi^0 \eta$ $\quad$ -1482
- $\omega \bar{K}^0 \pi^0 \eta'$ $\quad$ -1483
- $\pi^+ \pi^- \pi^+ K^- \pi^0$ $\quad$ -1484
- $\pi^+ \pi^- \pi^+ K^- \eta$ $\quad$ -1485
- $\pi^+ \pi^- \pi^+ K^- \eta'$ $\quad$ -1486
- $\pi^0 \pi^0 \pi^+ K^- \pi^0$ $\quad$ -1487
- $\pi^0 \pi^0 \pi^+ K^- \eta$ $\quad$ -1488
- $\pi^0 \pi^0 \pi^+ K^- \eta'$ $\quad$ -1489
- $\pi^+ \pi^- \pi^+ \bar{K}^0 \pi^-$ $\quad$ -1490
- $\pi^+ \pi^- \pi^0 \bar{K}^0 \pi^0$ $\quad$ -1491
- $\pi^+ \pi^- \pi^0 \bar{K}^0 \eta$ $\quad$ -1492
- $\pi^+ \pi^- \pi^0 \bar{K}^0 \eta'$ $\quad$ -1493

- $\pi^0 \pi^0 \pi^0 \bar{K}^0 \pi^0$ $\quad$ -1494
- $\pi^0 \pi^0 \pi^0 \bar{K}^0 \eta$ $\quad$ -1495
- $\pi^0 \pi^0 \pi^0 \bar{K}^0 \eta'$ $\quad$ -1496
- $\rho^+ \bar{K}_0^{*0} \pi^-$ $\quad$ -1497
- $\rho^0 \bar{K}_0^{*0} \pi^0$ $\quad$ -1498
- $\rho^0 \bar{K}_0^{*0} \eta$ $\quad$ -1499
- $\rho^0 \bar{K}_0^{*0} \eta'$ $\quad$ -1500
- $\rho^- \bar{K}_0^{*0} \pi^+$ $\quad$ -1501
- $\rho^+ K_0^{*-} \pi^0$ $\quad$ -1502
- $\rho^+ K_0^{*-} \eta$ $\quad$ -1503
- $\rho^+ K_0^{*-} \eta'$ $\quad$ -1504
- $\rho^0 K_0^{*-} \pi^+$ $\quad$ -1505
- $\pi^+ \pi^- K_0^{*-} \pi^+$ $\quad$ -1506
- $\pi^+ \pi^0 K_0^{*-} \pi^0$ $\quad$ -1507
- $\pi^+ \pi^0 K_0^{*-} \eta$ $\quad$ -1508
- $\pi^+ \pi^0 K_0^{*-} \eta'$ $\quad$ -1509
- $\pi^+ \pi^- \bar{K}_0^{*0} \pi^0$ $\quad$ -1510
- $\pi^+ \pi^- \bar{K}_0^{*0} \eta$ $\quad$ -1511
- $\pi^+ \pi^- \bar{K}_0^{*0} \eta'$ $\quad$ -1512
- $\pi^0 \pi^0 \bar{K}_0^{*0} \pi^0$ $\quad$ -1513
- $\pi^0 \pi^0 \bar{K}_0^{*0} \eta$ $\quad$ -1514
- $\pi^0 \pi^0 \bar{K}_0^{*0} \eta'$ $\quad$ -1515
- $K^{*-} f_0 \pi^+$ $\quad$ -1516
- $\bar{K}^{*0} f_0 \pi^0$ $\quad$ -1517
- $\bar{K}^{*0} f_0 \eta$ $\quad$ -1518

- $\bar{K}^{*0} f_0 \eta'$ $\quad$ -1519
- $a_1^+ \bar{K}^0 \pi^-$ $\quad$ -1520
- $a_1^0 \bar{K}^{*0}$ $\quad$ -1521
- $a_1^0 K^- \pi^+$ $\quad$ -1522
- $a_1^0 \bar{K}^0 \pi^0$ $\quad$ -1523
- $a_1^+ K^{*-}$ $\quad$ -1524
- $a_1^+ K^- \pi^0$ $\quad$ -1525
- $a_1^- \bar{K}^0 \pi^+$ $\quad$ -1526
- $K^{*-} a_0^0 \pi^+$ $\quad$ -1527
- $K^{*-} a_0^+ \pi^0$ $\quad$ -1528
- $K^{*-} a_0^+ \eta$ $\quad$ -1529
- $K^{*-} a_0^+ \eta'$ $\quad$ -1530
- $\bar{K}^{*0} a_0^+ \pi^-$ $\quad$ -1531
- $\bar{K}^{*0} a_0^0 \pi^0$ $\quad$ -1532
- $\bar{K}^{*0} a_0^0 \eta$ $\quad$ -1533
- $\bar{K}^{*0} a_0^0 \eta'$ $\quad$ -1534
- $K^{*-} K^{*0} \pi^+$ $\quad$ -1535
- $K^{*+} \bar{K}^{*0} \pi^-$ $\quad$ -1536
- $K^{*-} K^{*+} \pi^0$ $\quad$ -1537
- $K^{*-} K^{*+} \eta$ $\quad$ -1538
- $K^{*-} K^{*+} \eta'$ $\quad$ -1539
- $K^{*0} \bar{K}^{*0} \pi^0$ $\quad$ -1540
- $K^{*0} \bar{K}^{*0} \eta$ $\quad$ -1541
- $K^{*0} \bar{K}^{*0} \eta'$ $\quad$ -1542
- $\phi \rho^+ \pi^-$ $\quad$ -1543

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- $\phi \rho^- \pi^+$ -1544
- $\phi \rho^0 \pi^0$ -1545
- $\phi \rho^0 \eta$ -1546
- $\phi \rho^0 \eta'$ -1547
- $\phi \omega \pi^0$ -1548
- $\phi f_0 \pi^0$ -1549
- $\phi \pi^+ \pi^- \pi^0$ -1550
- $\phi \pi^+ \pi^- \eta$ -1551
- $\phi \pi^+ \pi^- \eta'$ -1552
- $\phi \pi^0 \pi^0 \pi^0$ -1553
- $\phi \pi^0 \pi^0 \eta$ -1554
- $\phi \pi^0 \pi^0 \eta'$ -1555
- $K^0 K^- \rho^0 \pi^+$ -1556
- $K^0 K^- \rho^+ \pi^0$ -1557
- $K^0 K^- \rho^+ \eta$ -1558
- $K^0 K^- \rho^+ \eta'$ -1559
- $K^0 K^- \omega \pi^+$ -1560
- $K^0 K^- f_0 \pi^+$ -1561
- $K^+ K^- \rho^+ \pi^-$ -1562
- $K^+ K^- \rho^- \pi^+$ -1563
- $K^+ K^- \rho^0 \pi^0$ -1564
- $K^+ K^- \rho^0 \eta$ -1565
- $K^+ K^- \rho^0 \eta'$ -1566
- $K^+ K^- \omega \pi^0$ -1567
- $K^+ K^- \omega \eta$ -1568

- $K^+ K^- \omega \eta'$ -1569
- $K^+ K^- f_0 \pi^0$ -1570
- $K^0 \bar{K}^0 \rho^+ \pi^-$ -1571
- $K^0 \bar{K}^0 \rho^- \pi^+$ -1572
- $K^0 \bar{K}^0 \rho^0 \pi^0$ -1573
- $K^0 \bar{K}^0 \rho^0 \eta$ -1574
- $K^0 \bar{K}^0 \rho^0 \eta'$ -1575
- $K^0 \bar{K}^0 \omega \pi^0$ -1576
- $K^0 \bar{K}^0 f_0 \pi^0$ -1577
- $\bar{K}^0 K^+ \rho^0 \pi^-$ -1578
- $\bar{K}^0 K^+ \rho^- \pi^0$ -1579
- $\bar{K}^0 K^+ \rho^- \eta$ -1580
- $\bar{K}^0 K^+ \rho^- \eta'$ -1581
- $\bar{K}^0 K^+ \omega \pi^-$ -1582
- $\bar{K}^0 K^+ f_0 \pi^-$ -1583
- $K^0 K^- \pi^+ \pi^+ \pi^-$ -1584
- $K^0 K^- \pi^+ \pi^0 \pi^0$ -1585
- $K^0 K^- \pi^+ \pi^0 \eta$ -1586
- $K^0 K^- \pi^+ \pi^0 \eta'$ -1587
- $K^+ K^- \pi^+ \pi^- \pi^0$ -1588
- $K^+ K^- \pi^+ \pi^- \eta$ -1589
- $K^+ K^- \pi^+ \pi^- \eta'$ -1590
- $K^+ K^- \pi^0 \pi^0 \pi^0$ -1591
- $K^+ K^- \pi^0 \pi^0 \eta$ -1592
- $K^+ K^- \pi^0 \pi^0 \eta'$ -1593

- $K^0 \bar{K}^0 \pi^+ \pi^- \pi^0$ -1594
- $K^0 \bar{K}^0 \pi^+ \pi^- \eta$ -1595
- $K^0 \bar{K}^0 \pi^+ \pi^- \eta'$ -1596
- $K^0 \bar{K}^0 \pi^0 \pi^0 \pi^0$ -1597
- $K^0 \bar{K}^0 \pi^0 \pi^0 \eta$ -1598
- $K^0 \bar{K}^0 \pi^0 \pi^0 \eta'$ -1599
- $\bar{K}^0 K^+ \pi^- \pi^+ \pi^-$ -1600
- $\bar{K}^0 K^+ \pi^- \pi^0 \pi^0$ -1601
- $\bar{K}^0 K^+ \pi^- \pi^0 \eta$ -1602
- $\bar{K}^0 K^+ \pi^- \pi^0 \eta'$ -1603
- $K^{*0} K^- \pi^+ \pi^0$ -1604
- $K^{*0} K^- \pi^+ \eta$ -1605
- $K^{*0} K^- \pi^+ \eta'$ -1606
- $K^{*-} K^0 \pi^+ \pi^0$ -1607
- $K^{*-} K^0 \pi^+ \eta$ -1608
- $K^{*-} K^0 \pi^+ \eta'$ -1609
- $K^{*+} K^- \pi^+ \pi^-$ -1610
- $K^{*+} K^- \pi^0 \pi^0$ -1611
- $K^{*+} K^- \pi^0 \eta$ -1612
- $K^{*+} K^- \pi^0 \eta'$ -1613
- $K^{*-} K^+ \pi^+ \pi^-$ -1614
- $K^{*-} K^+ \pi^0 \pi^0$ -1615
- $K^{*-} K^+ \pi^0 \eta$ -1616
- $K^{*-} K^+ \pi^0 \eta'$ -1617
- $K^{*0} \bar{K}^0 \pi^+ \pi^-$ -1618

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- $K^{*0}\bar{K}^0\pi^0\pi^0$ -1619
- $K^{*0}\bar{K}^0\pi^0\eta$ -1620
- $K^{*0}\bar{K}^0\pi^0\eta'$ -1621
- $K^0\bar{K}^{*0}\pi^+\pi^-$ -1622
- $K^0\bar{K}^{*0}\pi^0\pi^0$ -1623
- $K^0\bar{K}^{*0}\pi^0\eta$ -1624
- $K^0\bar{K}^{*0}\pi^0\eta'$ -1625
- $K^+\bar{K}^{*0}\pi^-\pi^0$ -1626
- $K^+\bar{K}^{*0}\pi^-\eta$ -1627
- $K^+\bar{K}^{*0}\pi^-\eta'$ -1628
- $K^{*+}\bar{K}^0\pi^-\pi^0$ -1629
- $K^{*+}\bar{K}^0\pi^-\eta$ -1630
- $K^{*+}\bar{K}^0\pi^-\eta'$ -1631
- $\phi K^{*-}\pi^+$ -1632
- $\phi\bar{K}^{*0}\pi^0$ -1633
- $\phi\bar{K}^{*0}\eta$ -1634
- $\phi\bar{K}^{*0}\eta'$ -1635
- $\phi K^-\rho^+$ -1636
- $\phi\bar{K}^0\rho^0$ -1637
- $\phi\bar{K}^0\omega$ -1638
- $\phi\bar{K}^0 f_0$ -1639
- $\phi\bar{K}^0\pi^+\pi^-$ -1640
- $\phi\bar{K}^0\pi^0\pi^0$ -1641
- $\phi\bar{K}^0\pi^0\eta$ -1642
- $\phi\bar{K}^0\pi^0\eta'$ -1643

- $\phi K^-\pi^+\pi^0$ -1644
- $\phi K^-\pi^+\eta$ -1645
- $\phi K^-\pi^+\eta'$ -1646
- $K^+K^-K^{*-}\pi^+$ -1647
- $K^-K^{*+}K^-\pi^+$ -1648
- $K^-K^{*0}\bar{K}^0\pi^+$ -1649
- $K^-K^0\bar{K}^{*0}\pi^+$ -1650
- $K^0 K^{*-}\bar{K}^0\pi^+$ -1651
- $K^-K^+K^-\rho^+$ -1652
- $K^-K^+\bar{K}^0\rho^0$ -1653
- $K^-K^+\bar{K}^0\omega$ -1654
- $K^-K^+\bar{K}^0 f_0$ -1655
- $K^+K^-K^-\pi^+\pi^0$ -1656
- $K^+K^-K^-\pi^+\eta$ -1657
- $K^+K^-K^-\pi^+\eta'$ -1658
- $K^+K^-\bar{K}^0\pi^+\pi^-$ -1659
- $K^+K^-\bar{K}^0\pi^0\pi^0$ -1660
- $K^+K^-\bar{K}^0\pi^0\eta$ -1661
- $K^+K^-\bar{K}^0\pi^0\eta'$ -1662
- $K^0\bar{K}^0 K^-\pi^+\pi^0$ -1663
- $K^0\bar{K}^0 K^-\pi^+\eta$ -1664
- $K^0\bar{K}^0 K^-\pi^+\eta'$ -1665
- $K^0\bar{K}^0\bar{K}^0\pi^+\pi^-$ -1666
- $K^0\bar{K}^0\bar{K}^0\pi^0\pi^0$ -1667
- $K^0\bar{K}^0\bar{K}^0\pi^0\eta$ -1668

- $K^0\bar{K}^0\bar{K}^0\pi^0\eta'$ -1669
- $\phi K_0^{*-}\pi^+$ -1670
- $\phi\bar{K}_0^{*0}\pi^0$ -1671
- $K^+K^-K_0^{*-}\pi^+$ -1672
- $K^+K^-\bar{K}_0^{*0}\pi^0$ -1673
- $K^+K^-\bar{K}_0^{*0}\eta$ -1674
- $K^+K^-\bar{K}_0^{*0}\eta'$ -1675
- $K^-K^-K_0^{*+}\pi^+$ -1676
- $K^-\bar{K}_0^{*0}K^0\pi^+$ -1677
- $K^-K_0^{*0}\bar{K}^0\pi^+$ -1678
- $K^0\bar{K}^0 K_0^{*-}\pi^+$ -1679
- $K^0\bar{K}^0\bar{K}_0^{*0}\pi^0$ -1680
- $K^0\bar{K}^0\bar{K}_0^{*0}\eta$ -1681
- $K^0\bar{K}^0\bar{K}_0^{*0}\eta'$ -1682
- $\bar{K}^0\bar{K}^0 K_0^{*0}\pi^0$ -1683
- $\bar{K}^0\bar{K}^0 K_0^{*0}\eta$ -1684
- $\bar{K}^0\bar{K}^0 K_0^{*0}\eta'$ -1685
- $\phi K_1'^-\pi^+$ -1686
- $\phi\bar{K}_1'^0\pi^0$ -1687
- $\phi\bar{K}_1'^0\eta$ -1688
- $\phi\bar{K}_1'^0\eta'$ -1689
- $K^-K^+K_1'^-\pi^+$ -1690
- $K^-K^+\bar{K}_1'^0\pi^0$ -1691
- $K^-K^+\bar{K}_1'^0\eta$ -1692
- $K^-K^+\bar{K}_1'^0\eta'$ -1693

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- $K^- K^- K_1'^+ \pi^+$ -1694
- $K^0 \bar{K}^0 \bar{K}_1'^0 \pi^0$ -1695
- $K^0 \bar{K}^0 \bar{K}_1'^0 \eta$ -1696
- $K^0 \bar{K}^0 \bar{K}_1'^0 \eta'$ -1697
- $\bar{K}^0 \bar{K}^0 K_1'^0 \pi^0$ -1698
- $\bar{K}^0 \bar{K}^0 K_1'^0 \eta$ -1699
- $\bar{K}^0 \bar{K}^0 K_1'^0 \eta'$ -1700
- $\phi\phi\bar{K}^0$ -1701
- $\phi\phi\pi^0$ -1702
- $\phi K^+ K^- \bar{K}^0$ -1703
- $\phi K^0 \bar{K}^0 \bar{K}^0$ -1704
- $\phi K^+ K^- \pi^0$ -1705
- $\phi K^0 \bar{K}^0 \pi^0$ -1706
- $\phi \bar{K}^0 K^+ \pi^-$ -1707
- $\phi K^0 K^- \pi^+$ -1708
- $K^+ K^- K^+ K^- \bar{K}^0$ -1709
- $K^0 \bar{K}^0 K^+ K^- \bar{K}^0$ -1710
- $K^+ K^- K^+ K^- \pi^0$ -1711
- $K^+ K^- K^0 \bar{K}^0 \pi^0$ -1712
- $K^+ K^- K^+ \bar{K}^0 \pi^-$ -1713
- $K^+ K^- K^0 K^- \pi^+$ -1714
- $K^0 \bar{K}^0 K^0 \bar{K}^0 \pi^0$ -1715
- $K^0 \bar{K}^0 \bar{K}^0 K^+ \pi^-$ -1716
- $K^0 \bar{K}^0 K^0 K^- \pi^+$ -1717
- $\phi\phi\bar{K}^{*0}$ -1718

- $\phi K^+ K^- \bar{K}^{*0}$ -1719
- $\phi K^0 \bar{K}^0 \bar{K}^{*0}$ -1720
- $\phi \bar{K}^0 K^- K^{*+}$ -1721
- $\phi \bar{K}^0 \bar{K}^0 K^{*0}$ -1722
- $\phi K^+ K^- K^- \pi^+$ -1723
- $\phi K^+ K^- \bar{K}^0 \pi^0$ -1724
- $\phi K^0 \bar{K}^0 K^- \pi^+$ -1725
- $\phi K^0 \bar{K}^0 \bar{K}^0 \pi^0$ -1726
- $a_1^0 a_1^0$ -1727
- $a_1^+ a_1^-$ -1728
- $J/\psi K_S^0$ -1729
- $J/\psi K_L^0$ -1730
- $J/\psi K^* S$ -1731
- $J/\psi K^* L$ -1732
- $J/\psi \bar{K}^{*0} T$ -1733
- $J/\psi \pi^0$ -1734
- $J/\psi \rho^0$ -1735
- $J/\psi \omega$ -1736
- $J/\psi \bar{K}^0 \pi^0$ -1737
- $J/\psi \bar{K}^0 \pi^+ \pi^-$ -1738
- $J/\psi \bar{K}_1^0$ -1739
- $J/\psi \bar{K}_1'^0$ -1740
- $J/\psi \bar{K}_2^{*0}$ -1741
- $J/\psi \bar{K}^0 \phi$ -1742
- $J/\psi K^- \pi^+$ -1743

- $J/\psi \eta \bar{K}^0$ -1744
- $J/\psi \omega \bar{K}^0$ -1745
- $J/\psi \eta$ -1746
- $J/\psi \pi^+ \pi^-$ -1747
- $J/\psi f_2$ -1748
- $J/\psi K^+ K^-$ -1749
- $J/\psi \eta'$ -1750
- $J/\psi \bar{K}^0 K^+ K^-$ -1751
- $J/\psi \bar{K}^0 \rho^0$ -1752
- $J/\psi K^{*-} \pi^+$ -1753
- $J/\psi \pi^+ \pi^- \pi^+ \pi^-$ -1754
- $J/\psi f_1$ -1755
- $J/\psi \bar{K}^{*0} \pi^+ \pi^-$ -1756
- $\psi(2S) K_S^0$ -1757
- $\psi(2S) K_L^0$ -1758
- $\psi(2S) K^* S$ -1759
- $\psi(2S) K^* L$ -1760
- $\psi(2S) \bar{K}^{*0} T$ -1761
- $\psi(2S) K^- \pi^+$ -1762
- $\psi(2S) \bar{K}^0 \pi^0$ -1763
- $\psi(2S) \bar{K}^0 \pi^+ \pi^-$ -1764
- $\psi(2S) \bar{K}^0 \pi^0 \pi^0$ -1765
- $\psi(2S) K^- \pi^+ \pi^0$ -1766
- $\psi(2S) \bar{K}_1^0$ -1767
- $\psi(2S) \pi^+ \pi^-$ -1768

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- $\psi(2S)\pi^0$ -1769
- $\eta_c K_S^0$ -1770
- $\eta_c K_L^0$ -1771
- $K^*S\eta_c$ -1772
- $K^*L\eta_c$ -1773
- $\bar{K}^{*0}T\eta_c$ -1774
- $\eta_c K^-\pi^+$ -1775
- $\eta_c \bar{K}^0\pi^0$ -1776
- $\eta_c \bar{K}^0\pi^+\pi^-$ -1777
- $\eta_c \bar{K}^0\pi^0\pi^0$ -1778
- $\eta_c K^-\pi^+\pi^0$ -1779
- $\eta_c(2S)K_S^0$ -1780
- $\eta_c(2S)K_L^0$ -1781
- $K^*S\eta_c(2S)$ -1782
- $K^*L\eta_c(2S)$ -1783
- $\bar{K}^{*0}T\eta_c(2S)$ -1784
- $\eta_c(2S)K^-\pi^+$ -1785
- $\eta_c(2S)\bar{K}^0\pi^0$ -1786
- $\eta_c(2S)\bar{K}^0\pi^+\pi^-$ -1787
- $\eta_c(2S)\bar{K}^0\pi^0\pi^0$ -1788
- $\eta_c(2S)K^-\pi^+\pi^0$ -1789
- $\chi_{c0}K_S^0$ -1790
- $\chi_{c0}K_L^0$ -1791
- $K^*S\chi_{c0}$ -1792
- $K^*L\chi_{c0}$ -1793

- $\bar{K}^{*0}T\chi_{c0}$ -1794
- $\chi_{c0}K^-\pi^+$ -1795
- $\chi_{c0}\bar{K}^0\pi^0$ -1796
- $\chi_{c0}\bar{K}^0\pi^+\pi^-$ -1797
- $\chi_{c0}\bar{K}^0\pi^0\pi^0$ -1798
- $\chi_{c0}K^-\pi^+\pi^0$ -1799
- $\chi_{c1}K_S^0$ -1800
- $\chi_{c1}K_L^0$ -1801
- $K^*S\chi_{c1}$ -1802
- $K^*L\chi_{c1}$ -1803
- $\chi_{c1}\bar{K}^{*0}T$ -1804
- $\chi_{c1}K^-\pi^+$ -1805
- $\chi_{c1}\bar{K}^0\pi^0$ -1806
- $\chi_{c1}\bar{K}^0\pi^+\pi^-$ -1807
- $\chi_{c1}\bar{K}^0\pi^0\pi^0$ -1808
- $\chi_{c1}K^-\pi^+\pi^0$ -1809
- $\chi_{c1}\pi^0$ -1810
- $\chi_{c2}K_S^0$ -1811
- $\chi_{c2}K_L^0$ -1812
- $\chi_{c2}\bar{K}^{*0}$ -1813
- $\chi_{c2}K^-\pi^+$ -1814
- $\chi_{c2}\bar{K}^0\pi^0$ -1815
- $\chi_{c2}\bar{K}^0\pi^+\pi^-$ -1816
- $\chi_{c2}K^-\pi^+\pi^0$ -1817
- $\chi_{c2}\bar{K}^0\pi^0\pi^0$ -1818

- $\psi(377^0)K_S^0$ -1819
- $\psi(377^0)K_L^0$ -1820
- $\psi(377^0)K^*S$ -1821
- $\psi(377^0)K^*L$ -1822
- $\psi(377^0)\bar{K}^{*0}T$ -1823
- $\psi(377^0)\bar{K}^0\pi^0$ -1824
- $\psi(377^0)\bar{K}^0\pi^+\pi^-$ -1825
- $\psi(377^0)\bar{K}^0\pi^0\pi^0$ -1826
- $\psi(377^0)K^-\pi^+\pi^0$ -1827
- $\psi(377^0)\bar{K}_1^0$ -1828
- D^-D^+ -1829
- $D^{*+}D^-$ -1830
- $D^{*-}D^+$ -1831
- $D^{*+}D^{*-}$ -1832
- $D^+D_s^-$ -1833
- $D^{*+}D_s^-$ -1834
- $D_s^{*-}D^+$ -1835
- $D^{*+}D_s^{*-}$ -1836
- $D_1'^+D_s^-$ -1837
- $D_1'^+D_s^{*-}$ -1838
- $D_1^+D_s^-$ -1839
- $D_1^+D_s^{*-}$ -1840
- $D_2^{*+}D_s^-$ -1841
- $D_2^{*+}D_s^{*-}$ -1842
- $D_s^-D^+\pi^0$ -1843

- $D_s^- D^0 \pi^+$ -1844
- $D_s^{*-} D^+ \pi^0$ -1845
- $D_s^{*-} D^0 \pi^+$ -1846
- $D_s^- D^+ \pi^+ \pi^-$ -1847
- $D_s^- D^+ \pi^0 \pi^0$ -1848
- $D_s^- D^0 \pi^+ \pi^0$ -1849
- $D_s^{*-} D^+ \pi^+ \pi^-$ -1850
- $D_s^{*-} D^+ \pi^0 \pi^0$ -1851
- $D_s^{*-} D^0 \pi^+ \pi^0$ -1852
- $D^+ \bar{D}^0 K^-$ -1853
- $D^+ \bar{D}^{*0} K^-$ -1854
- $D^{*+} \bar{D}^0 K^-$ -1855
- $D^{*+} \bar{D}^{*0} K^-$ -1856
- $D^+ D^- \bar{K}^0$ -1857
- $D^{*+} D^- \bar{K}^0$ -1858
- $D^+ D^{*-} \bar{K}^0$ -1859
- $D^{*+} D^{*-} \bar{K}^0$ -1860
- $D^0 \bar{D}^0 \bar{K}^0$ -1861
- $D^{*0} \bar{D}^0 \bar{K}^0$ -1862
- $D^0 \bar{D}^{*0} \bar{K}^0$ -1863
- $D^{*0} \bar{D}^{*0} \bar{K}^0$ -1864
- $D^+ \bar{D}^0 K^{*-}$ -1865
- $D^{*+} \bar{D}^0 K^{*-}$ -1866
- $D^+ \bar{D}^{*0} K^{*-}$ -1867
- $D^{*+} \bar{D}^{*0} K^{*-}$ -1868

- $D^+ D^- \bar{K}^{*0}$ -1869
- $D^{*+} D^- \bar{K}^{*0}$ -1870
- $D^+ D^{*-} \bar{K}^{*0}$ -1871
- $D^{*+} D^{*-} \bar{K}^{*0}$ -1872
- $\bar{D}^0 D^0 \bar{K}^{*0}$ -1873
- $\bar{D}^0 D^{*0} \bar{K}^{*0}$ -1874
- $\bar{D}^{*0} D^0 \bar{K}^{*0}$ -1875
- $\bar{D}^{*0} D^{*0} \bar{K}^{*0}$ -1876
- $D^{*+} \pi^-$ -1877
- $D^+ \pi^-$ -1878
- $\rho^- D^+$ -1879
- $\rho^- D^{*+}$ -1880
- $D^+ \pi^- \pi^0$ -1881
- $D^{*+} \pi^- \pi^0$ -1882
- $D^0 \pi^+ \pi^-$ -1883
- $D^{*0} \pi^+ \pi^-$ -1884
- $D^{*0} \pi^0 \pi^0$ -1885
- $a_1^- D^+$ -1886
- $D^+ \rho^0 \pi^-$ -1887
- $D^+ \rho^- \pi^0$ -1888
- $D^+ \pi^+ \pi^- \pi^-$ -1889
- $D^+ \pi^0 \pi^- \pi^0$ -1890
- $D^0 \pi^+ \pi^- \pi^0$ -1891
- $D^0 \pi^0 \pi^0 \pi^0$ -1892
- $D^{*+} a_1^-$ -1893

- $D^{*+} \rho^0 \pi^-$ -1894
- $D^{*+} \rho^- \pi^0$ -1895
- $D^{*+} \pi^+ \pi^- \pi^-$ -1896
- $D^{*+} \pi^0 \pi^- \pi^0$ -1897
- $D^{*0} \pi^+ \pi^- \pi^0$ -1898
- $D^{*0} \pi^0 \pi^0 \pi^0$ -1899
- $D_1^+ \pi^-$ -1900
- $D_1'^+ \pi^-$ -1901
- $D_0^{*+} \pi^-$ -1902
- $D_2^{*+} \pi^-$ -1903
- $D_1^+ \rho^-$ -1904
- $D_1'^+ \rho^-$ -1905
- $D_2^{*+} \rho^-$ -1906
- $D^{*+} K^-$ -1907
- $D^+ K^-$ -1908
- $D^{*+} K^{*-}$ -1909
- $K^{*-} D^+$ -1910
- $D^{*0} K^0$ -1911
- $D^0 K^0$ -1912
- $\bar{K}^{*0} D^0$ -1913
- $\bar{K}^{*0} \bar{D}^0$ -1914
- $D^{*0} \bar{K}^{*0}$ -1915
- $\bar{D}^{*0} \bar{K}^{*0}$ -1916
- $D^0 \pi^0$ -1917
- $D^{*0} \pi^0$ -1918

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- $\rho^0 D^0$ -1919
- $D^{*0}\rho^0$ -1920
- $D^0\eta$ -1921
- $D^{*0}\eta$ -1922
- $D^0\eta'$ -1923
- $D^{*0}\eta'$ -1924
- ωD^0 -1925
- $D^{*0}\omega$ -1926
- $p^+\bar{p}^-$ -1927
- $D_{s0}^{*-}D^+$ -1928
- $D^{*+}D_{s0}^{*-}$ -1929
- $D_{s1}^-D^+$ -1930
- $D^{*+}D_{s1}^-$ -1931
- $D^+K^-K^{*0}$ -1932
- $D^{*+}K^-K^{*0}$ -1933
- $D^{*+}K^0\pi^-$ -1934
- $D^{*-}K^0\pi^+$ -1935
- $D^+\bar{K}^0\pi^-$ -1936
- $D^+\omega\pi^-$ -1937
- $D^{*+}\omega\pi^-$ -1938
- $D_{s1}'^-D^+$ -1939
- $D_{s1}'^-D^{*+}$ -1940
- $cd_0\bar{u}d_0$ -1941
- $cd_1\bar{u}d_1$ -1942
- $cs_0\bar{u}d_0$ -1943
- $cs_1\bar{u}d_1$ -1944
- $\bar{u}dc\bar{d}$ -1945
- $\bar{u}dc\bar{d}$ -1946

- $\bar{u}sc\bar{d}$ -1947
- $\bar{u}cd\bar{d}$ -1948
- $\bar{u}cs\bar{d}$ -1949
- $\bar{c}sc\bar{d}$ -1950
- $\bar{c}dc\bar{d}$ -1951
- $\bar{u}du\bar{d}$ -1952
- $\bar{c}su\bar{d}$ -1953
- $\bar{u}ud\bar{d}$ -1954
- $\bar{d}dd\bar{d}$ -1955
- $\bar{s}sd\bar{d}$ -1956
- $\bar{u}us\bar{d}$ -1957
- $\bar{d}ds\bar{d}$ -1958
- $\bar{s}ss\bar{d}$ -1959
- $s\bar{d}$ -1960
- $D^0\bar{K}^0$ -1961
- $D^0K^-\pi^+$ -1962
- $\bar{D}^0K^-\pi^+$ -1963
- $D^{*0}\bar{K}^0$ -1964
- $\bar{D}^{*0}\pi^-\pi^-\pi^+\pi^+$ -1965
- $\eta_c\bar{K}^0$ -1966
- $\bar{K}^0\bar{D}^0D^0\pi^0$ -1967
- $\psi(2S)\bar{K}^0$ -1968
- $\chi_{c0}\bar{K}^0$ -1969
- $\chi_{c1}\bar{K}^0$ -1970
- $\chi_{c1}K^+\pi^-$ -1971
- $\bar{K}^0\rho^0$ -1972
- $\eta\bar{K}_0^{*0}$ -1973
- $\eta\bar{K}_2^{*0}$ -1974

- $\omega\bar{K}_0^{*0}$ -1975
- $\omega\bar{K}_2^{*0}$ -1976
- $f_2\bar{K}^0$ -1977
- $f_0K^-\pi^+$ -1978
- $\bar{K}_2^{*0}\phi$ -1979
- $\eta\bar{K}^0\gamma$ -1980
- $\bar{p}^-p^+\bar{K}^0$ -1981
- $\bar{p}^-p^+\bar{K}^{*0}$ -1982
- $\bar{p}^-\Lambda^0\pi^+$ -1983
- $\Lambda^0\bar{\Lambda}^0\bar{K}^0$ -1984
- $\Lambda^0\bar{\Lambda}^0\bar{K}^{*0}$ -1985
- $\Lambda^0\bar{\Lambda}^0\bar{D}^0$ -1986
- $D^0\bar{p}^-p^+$ -1987
- $D_s^+\Lambda^0\bar{p}^-$ -1988
- $D^{*0}\bar{p}^-p^+$ -1989
- $D^{*+}\bar{p}^-n^0$ -1990
- $D^+\bar{p}^-p^+\pi^-$ -1991
- $D^{*+}\bar{p}^-p^+\pi^-$ -1992
- $\Lambda_c^+\bar{p}^-$ -1993
- $\Lambda_c^+\bar{p}^-\pi^-\pi^+$ -1994
- $\Sigma_c^{*++}\bar{p}^-\pi^-$ -1995
- $\Sigma_{c0}\bar{p}^-\pi^+$ -1996
- $\Sigma_c^{++}\bar{p}^-\pi^-$ -1997
- $D^{*+}\pi^-\pi^-\pi^+\pi^0$ -1998
- $D^{*+}\pi^-\pi^-\pi^-\pi^+\pi^+$ -1999
- $D_s^+\pi^-\bar{K}^0$ -2000

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E List of tag numbers for B_s^0 decays

Tag numbers for the 264 B_s^0 decays are following.

- $D_s^- e^+ \nu_e$ +1001
- $D_s^{*-} e^+ \nu_e$ +1002
- $D_{s1}^- e^+ \nu_e$ +1003
- $D_{s0}^{*-} e^+ \nu_e$ +1004
- $D_{s1}'^- e^+ \nu_e$ +1005
- $D_{s2}^{*-} e^+ \nu_e$ +1006
- $D_s^- \mu^+ \nu_\mu$ +1007
- $D_s^{*-} \mu^+ \nu_\mu$ +1008
- $D_{s1}^- \mu^+ \nu_\mu$ +1009
- $D_{s0}^{*-} \mu^+ \nu_\mu$ +1010
- $D_{s1}'^- \mu^+ \nu_\mu$ +1011
- $D_{s2}^{*-} \mu^+ \nu_\mu$ +1012
- $D_s^- \tau^+ \nu_\tau$ +1013
- $D_s^{*-} \tau^+ \nu_\tau$ +1014
- $D_{s1}^- \tau^+ \nu_\tau$ +1015
- $D_{s0}^{*-} \tau^+ \nu_\tau$ +1016
- $D_{s1}'^- \tau^+ \nu_\tau$ +1017
- $D_{s2}^{*-} \tau^+ \nu_\tau$ +1018
- $D_s^- D_s^+$ +1019
- $D_s^{*+} D_s^-$ +1020
- $D_s^{*-} D_s^+$ +1021
- $D_s^{*-} D_s^{*+}$ +1022
- $D_s^+ D^- \bar{K}^0$ +1023

- $D_s^+ D^0 K^-$ +1024
- $D_s^{*+} D^- \bar{K}^0$ +1025
- $D_s^{*+} \bar{D}^0 K^-$ +1026
- $D_s^+ D^- \pi^0 \bar{K}^0$ +1027
- $D_s^+ \bar{D}^0 \pi^- \bar{K}^0$ +1028
- $D_s^+ D^- \pi^+ K^-$ +1029
- $D_s^+ \bar{D}^0 \pi^0 K^-$ +1030
- $D_s^{*+} D^- \pi^0 \bar{K}^0$ +1031
- $D_s^{*+} \bar{D}^0 \pi^- \bar{K}^0$ +1032
- $D_s^{*+} D^- \pi^+ K^-$ +1033
- $D_s^{*+} \bar{D}^0 \pi^0 K^-$ +1034
- $D_s^{*-} D^{*0} K^+$ +1035
- $D_s^{*-} D^{*+} K^0$ +1036
- $D_s^{*-} D^0 K^+$ +1037
- $D_s^{*-} D^+ K^0$ +1038
- $D_s^- D^{*0} K^+$ +1039
- $D_s^- D^{*+} K^0$ +1040
- $D_s^- D^0 K^+$ +1041
- $D_s^- D^+ K^0$ +1042
- $D_s^{*-} D^{*0} K^{*+}$ +1043
- $D_s^{*-} D^{*+} K^{*0}$ +1044
- $D_s^{*-} D^0 K^{*+}$ +1045
- $D_s^{*-} D^+ K^{*0}$ +1046

- $D_s^- D^{*0} K^{*+}$ +1047
- $D_s^- D^{*+} K^{*0}$ +1048
- $D_s^- D^0 K^{*+}$ +1049
- $D_s^- D^+ K^{*0}$ +1050
- $D_s^+ D^-$ +1051
- $D^{*-} D_s^+$ +1052
- $D_s^{*+} D^-$ +1053
- $D_s^{*+} D^{*-}$ +1054
- $D^+ D^- \bar{K}^0$ +1055
- $D^+ D^0 K^-$ +1056
- $D^{*+} D^- \bar{K}^0$ +1057
- $D^{*+} \bar{D}^0 K^-$ +1058
- $D^+ D^- \pi^0 \bar{K}^0$ +1059
- $D^+ \bar{D}^0 \pi^- \bar{K}^0$ +1060
- $D^+ D^- \pi^+ K^-$ +1061
- $D^+ \bar{D}^0 \pi^0 K^-$ +1062
- $D^{*+} D^- \pi^0 \bar{K}^0$ +1063
- $D^{*+} \bar{D}^0 \pi^- \bar{K}^0$ +1064
- $D^{*+} D^- \pi^+ K^-$ +1065
- $D^{*+} \bar{D}^0 \pi^0 K^-$ +1066
- $D_s^{*-} K^+$ +1067
- $D_s^- K^+$ +1068
- $D_s^{*-} K^{*+}$ +1069

- $K^{*+}D_s^-$ +1070
- $J/\psi\eta'$ +1071
- $J/\psi\eta$ +1072
- $J/\psi\phi$ +1073
- $J/\psi K^0$ +1074
- $J/\psi K^-K^+$ +1075
- $J/\psi\bar{K}^0K^0$ +1076
- $J/\psi K^0K^-\pi^+$ +1077
- $J/\psi\bar{K}^0K^+\pi^-$ +1078
- $J/\psi\bar{K}^0K^0\pi^0$ +1079
- $J/\psi K^-K^+\pi^0$ +1080
- $J/\psi\phi\pi^+\pi^-$ +1081
- $J/\psi\phi\pi^0\pi^0$ +1082
- $J/\psi\eta\pi^+\pi^-$ +1083
- $J/\psi\eta\pi^0\pi^0$ +1084
- $J/\psi\eta'\pi^+\pi^-$ +1085
- $J/\psi\eta'\pi^0\pi^0$ +1086
- $J/\psi\pi^+\pi^-$ +1087
- $J/\psi\pi^0\pi^0$ +1088
- $\psi(2S)\eta'$ +1089
- $\psi(2S)\eta$ +1090
- $\psi(2S)\phi$ +1091
- $\psi(2S)K^-K^+$ +1092
- $\psi(2S)\bar{K}^0K^0$ +1093
- $\psi(2S)K^0K^-\pi^+$ +1094

- $\psi(2S)\bar{K}^0K^0\pi^0$ +1095
- $\psi(2S)K^-K^+\pi^0$ +1096
- $\psi(2S)\phi\pi^+\pi^-$ +1097
- $\psi(2S)\phi\pi^0\pi^0$ +1098
- $\psi(2S)\eta\pi^+\pi^-$ +1099
- $\psi(2S)\eta\pi^0\pi^0$ +1100
- $\psi(2S)\eta'\pi^+\pi^-$ +1101
- $\psi(2S)\eta'\pi^0\pi^0$ +1102
- $\psi(2S)\pi^+\pi^-$ +1103
- $\psi(2S)\pi^0\pi^0$ +1104
- $\chi_{c0}\eta'$ +1105
- $\chi_{c0}\eta$ +1106
- $\phi\chi_{c0}$ +1107
- $\chi_{c0}K^-K^+$ +1108
- $\chi_{c0}\bar{K}^0K^0$ +1109
- $\chi_{c0}K^0K^-\pi^+$ +1110
- $\chi_{c0}\bar{K}^0K^0\pi^0$ +1111
- $\chi_{c0}K^-K^+\pi^0$ +1112
- $\chi_{c1}\eta'$ +1113
- $\chi_{c1}\eta$ +1114
- $\chi_{c1}\phi$ +1115
- $\chi_{c1}K^-K^+$ +1116
- $\chi_{c1}\bar{K}^0K^0$ +1117
- $\chi_{c1}K^0K^-\pi^+$ +1118
- $\chi_{c1}\bar{K}^0K^0\pi^0$ +1119

- $\chi_{c1}K^-K^+\pi^0$ +1120
- $\chi_{c1}\phi\pi^+\pi^-$ +1121
- $\chi_{c1}\phi\pi^0\pi^0$ +1122
- $\chi_{c1}\eta\pi^+\pi^-$ +1123
- $\chi_{c1}\eta\pi^0\pi^0$ +1124
- $\chi_{c1}\eta'\pi^+\pi^-$ +1125
- $\chi_{c1}\eta'\pi^0\pi^0$ +1126
- $\chi_{c2}\eta'$ +1127
- $\chi_{c2}\eta$ +1128
- $\chi_{c2}K^-K^+$ +1129
- $\chi_{c2}\bar{K}^0K^0$ +1130
- $\chi_{c2}K^0K^-\pi^+$ +1131
- $\chi_{c2}\bar{K}^0K^0\pi^0$ +1132
- $\chi_{c2}K^-K^+\pi^0$ +1133
- $\eta_c\eta'$ +1134
- $\eta_c\eta$ +1135
- $\phi\eta_c$ +1136
- $\eta_cK^-K^+$ +1137
- $\eta_cK^0\bar{K}^0$ +1138
- $\eta_cK^0K^-\pi^+$ +1139
- $\eta_cK^0\bar{K}^0\pi^0$ +1140
- $\eta_cK^-K^+\pi^0$ +1141
- $\eta_c\phi\pi^+\pi^-$ +1142
- $\eta_c\phi\pi^0\pi^0$ +1143
- $\eta_c\eta\pi^+\pi^-$ +1144

- $\eta_c\eta\pi^0\pi^0$ +1145
- $\eta_c\eta'\pi^+\pi^-$ +1146
- $\eta_c\eta'\pi^0\pi^0$ +1147
- $\eta_c(2S)\eta'$ +1148
- $\eta_c(2S)\eta$ +1149
- $\phi\eta_c(2S)$ +1150
- $\eta_c(2S)K^-K^+$ +1151
- $\eta_c(2S)\bar{K}^0K^0$ +1152
- $\eta_c(2S)K^0K^-\pi^+$ +1153
- $\eta_c(2S)\bar{K}^0K^0\pi^0$ +1154
- $\eta_c(2S)K^-K^+\pi^0$ +1155
- $h_c\eta'$ +1156
- $h_c\eta$ +1157
- $h_c\phi$ +1158
- $h_cK^-K^+$ +1159
- $h_c\bar{K}^0K^0$ +1160
- $h_cK^0K^-\pi^+$ +1161
- $h_c\bar{K}^0K^0\pi^0$ +1162
- $h_cK^-K^+\pi^0$ +1163
- $J/\psi\phi\phi$ +1164
- $J/\psi K_S^0$ +1165
- $J/\psi K^{*0}$ +1166
- $J/\psi\pi^+\pi^-\pi^+\pi^-$ +1167
- $J/\psi f_1$ +1168
- $\psi(2S)K^+\pi^-$ +1169

- $\psi(2S)K^{*0}$ +1170
- $D_{s1}^-\pi^+$ +1171
- $D_{s1}^-\rho^+$ +1172
- $D_{s2}^{*-}\pi^+$ +1173
- $D_s^{*-}\pi^+$ +1174
- $D_s^-\pi^+$ +1175
- $\rho^+D_s^-$ +1176
- $D_s^{*-}\rho^+$ +1177
- $a_1^+D_s^-$ +1178
- $D_s^-\rho^0\pi^+$ +1179
- $D_s^-\rho^+\pi^0$ +1180
- $D_s^-\pi^-\pi^+\pi^+$ +1181
- $D_s^-\pi^0\pi^+\pi^0$ +1182
- $D_s^{*-}a_1^+$ +1183
- $D_s^{*-}\rho^0\pi^+$ +1184
- $D_s^{*-}\rho^+\pi^0$ +1185
- $D_s^{*-}\pi^-\pi^+\pi^+$ +1186
- $D_s^{*-}\pi^0\pi^+\pi^0$ +1187
- $\bar{D}^{*0}\bar{K}^0$ +1188
- $\bar{D}^0\bar{K}^0$ +1189
- $\bar{K}^{*0}\bar{D}^0$ +1190
- $\bar{D}^{*0}\bar{K}^{*0}$ +1191
- $p^+\bar{p}^-$ +1192
- $\bar{c}s_0ud_0$ +1193
- $\bar{c}s_1ud_1$ +1194

- $ud\bar{c}s$ +1195
- $ud\bar{c}s$ +1196
- $uc\bar{d}s$ +1197
- $c\bar{s}us$ +1198
- $u\bar{s}cs$ +1199
- $u\bar{s}\bar{c}s$ +1200
- $uc\bar{s}s$ +1201
- $c\bar{d}\bar{c}s$ +1202
- $c\bar{d}\bar{c}s$ +1203
- $u\bar{u}\bar{d}s$ +1204
- $d\bar{d}\bar{d}s$ +1205
- $s\bar{s}\bar{d}s$ +1206
- $u\bar{u}\bar{s}s$ +1207
- $d\bar{d}\bar{s}s$ +1208
- $s\bar{s}\bar{s}s$ +1209
- $\bar{s}s$ +1210
- $K^-e^+\nu_e$ +1211
- $K^{*-}e^+\nu_e$ +1212
- $K_1^-e^+\nu_e$ +1213
- $K_1'^-e^+\nu_e$ +1214
- $K^-\mu^+\nu_\mu$ +1215
- $K^{*-}\mu^+\nu_\mu$ +1216
- $K_1^-\mu^+\nu_\mu$ +1217
- $K_1'^-\mu^+\nu_\mu$ +1218
- K^-K^+ +1219

- $\bar{K}^0 K^0$ +1220
- $K^{*0}\pi^0$ +1235
- $\bar{K}^{*0}\eta$ +1250
- $K_S^0 K_S^0$ +1221
- $K^{*+}K^-$ +1236
- $\rho^+ K^{*-}$ +1251
- $K_L^0 K_L^0$ +1222
- $K^{*0}\bar{K}^0$ +1237
- $\rho^0 \bar{K}^{*0}$ +1252
- $\pi^+ K^-$ +1223
- $K^{*0}K_S^0$ +1238
- $\omega \bar{K}^{*0}$ +1253
- $\pi^0 \bar{K}^0$ +1224
- $K^{*0}K_L^0$ +1239
- $K^{*-}K^{*+}$ +1254
- $\pi^+ \pi^-$ +1225
- $K^{*-}K^+$ +1240
- $\bar{K}^{*0}K^{*0}$ +1255
- $\omega\eta$ +1226
- $\bar{K}^{*0}K^0$ +1241
- $\phi\phi$ +1256
- $\omega\eta'$ +1227
- $\bar{K}^{*0}K_S^0$ +1242
- $\phi\bar{K}^{*0}$ +1257
- $\phi\eta$ +1228
- $\bar{K}^{*0}K_L^0$ +1243
- $\mu^+\mu^-$ +1258
- $\phi\eta'$ +1229
- $\eta'\eta'$ +1244
- $\tau^+\tau^-$ +1259
- ωK^0 +1230
- $\eta'\eta$ +1245
- $\phi\gamma$ +1260
- ϕK^0 +1231
- $\eta\eta$ +1246
- $\phi e^+ e^-$ +1261
- $K^{*-}\pi^+$ +1232
- $\bar{K}^0\eta'$ +1247
- $\phi\mu^+\mu^-$ +1262
- $\rho^+ K^-$ +1233
- $\bar{K}^0\eta$ +1248
- $\gamma\gamma$ +1263
- $\rho^0 K^0$ +1234
- $\bar{K}^{*0}\eta'$ +1249
- $D_s^+ K^-$ +1264

F List of tag numbers for $\bar{B}_s^0$ decays

Tag numbers for the 264 $\bar{B}_s^0$ decays are following.

- $D_s^+ e^- \bar{\nu}_e$ −1001
- $D_{s1}^+ \mu^- \bar{\nu}_\mu$ −1009
- $D_{s1}'^+ \tau^- \bar{\nu}_\tau$ −1017
- $D_s^{*+} e^- \bar{\nu}_e$ −1002
- $D_{s0}^{*+} \mu^- \bar{\nu}_\mu$ −1010
- $D_{s2}^{*+} \tau^- \bar{\nu}_\tau$ −1018
- $D_{s1}^+ e^- \bar{\nu}_e$ −1003
- $D_{s1}'^+ \mu^- \bar{\nu}_\mu$ −1011
- $D_s^- D_s^+$ −1019
- $D_{s0}^{*+} e^- \bar{\nu}_e$ −1004
- $D_{s2}^{*+} \mu^- \bar{\nu}_\mu$ −1012
- $D_s^{*+} D_s^-$ −1020
- $D_{s1}'^+ e^- \bar{\nu}_e$ −1005
- $D_s^+ \tau^- \bar{\nu}_\tau$ −1013
- $D_s^{*-} D_s^+$ −1021
- $D_{s2}^{*+} e^- \bar{\nu}_e$ −1006
- $D_s^{*+} \tau^- \bar{\nu}_\tau$ −1014
- $D_s^{*-} D_s^{*+}$ −1022
- $D_s^+ \mu^- \bar{\nu}_\mu$ −1007
- $D_{s1}^+ \tau^- \bar{\nu}_\tau$ −1015
- $D_s^- D^+ K^0$ −1023
- $D_s^{*+} \mu^- \bar{\nu}_\mu$ −1008
- $D_{s0}^{*+} \tau^- \bar{\nu}_\tau$ −1016
- $D_s^- \bar{D}^0 K^+$ −1024

- $D_s^{*-}D^+K^0$ -1025
- $D_s^{*-}D^0K^+$ -1026
- $D_s^-D^+\pi^0K^0$ -1027
- $D_s^-D^0\pi^+K^0$ -1028
- $D_s^-D^+\pi^-K^+$ -1029
- $D_s^-D^0\pi^0K^+$ -1030
- $D_s^{*-}D^+\pi^0K^0$ -1031
- $D_s^{*-}D^0\pi^+K^0$ -1032
- $D_s^{*-}D^+\pi^-K^+$ -1033
- $D_s^{*-}D^0\pi^0K^+$ -1034
- $D_s^{*+}\bar{D}^{*0}K^-$ -1035
- $D_s^{*+}D^{*-}\bar{K}^0$ -1036
- $D_s^{*+}\bar{D}^0K^-$ -1037
- $D_s^{*+}D^-\bar{K}^0$ -1038
- $D_s^+\bar{D}^{*0}K^-$ -1039
- $D_s^+D^{*-}\bar{K}^0$ -1040
- $D_s^+\bar{D}^0K^-$ -1041
- $D_s^+D^-\bar{K}^0$ -1042
- $D_s^{*+}\bar{D}^{*0}K^{*-}$ -1043
- $D_s^{*+}D^{*-}\bar{K}^{*0}$ -1044
- $D_s^{*+}\bar{D}^0K^{*-}$ -1045
- $D_s^{*+}D^-\bar{K}^{*0}$ -1046
- $D_s^+\bar{D}^{*0}K^{*-}$ -1047
- $D_s^+D^{*-}\bar{K}^{*0}$ -1048
- $D_s^+\bar{D}^0K^{*-}$ -1049

- $D_s^+D^-\bar{K}^{*0}$ -1050
- $D_s^-D^+$ -1051
- $D^{*+}D_s^-$ -1052
- $D_s^{*-}D^+$ -1053
- $D_s^{*-}D^{*+}$ -1054
- $D^-D^+K^0$ -1055
- $D^-\bar{D}^0K^+$ -1056
- $D^{*-}D^+K^0$ -1057
- $D^{*-}D^0K^+$ -1058
- $D^-D^+\pi^0K^0$ -1059
- $D^-D^0\pi^+K^0$ -1060
- $D^-D^+\pi^-K^+$ -1061
- $D^-D^0\pi^0K^+$ -1062
- $D^{*-}D^+\pi^0K^0$ -1063
- $D^{*-}D^0\pi^+K^0$ -1064
- $D^{*-}D^+\pi^-K^+$ -1065
- $D^{*-}D^0\pi^0K^+$ -1066
- $D_s^{*+}K^-$ -1067
- $D_s^+K^-$ -1068
- $D_s^{*+}K^{*-}$ -1069
- $K^{*-}D_s^+$ -1070
- $J/\psi\eta'$ -1071
- $J/\psi\eta$ -1072
- $J/\psi\phi$ -1073
- $J/\psi K^0$ -1074

- $J/\psi K^-K^+$ -1075
- $J/\psi\bar{K}^0K^0$ -1076
- $J/\psi K^0K^-\pi^+$ -1077
- $J/\psi\bar{K}^0K^+\pi^-$ -1078
- $J/\psi\bar{K}^0K^0\pi^0$ -1079
- $J/\psi K^-K^+\pi^0$ -1080
- $J/\psi\phi\pi^+\pi^-$ -1081
- $J/\psi\phi\pi^0\pi^0$ -1082
- $J/\psi\eta\pi^+\pi^-$ -1083
- $J/\psi\eta\pi^0\pi^0$ -1084
- $J/\psi\eta'\pi^+\pi^-$ -1085
- $J/\psi\eta'\pi^0\pi^0$ -1086
- $J/\psi\pi^+\pi^-$ -1087
- $J/\psi\pi^0\pi^0$ -1088
- $\psi(2S)\eta'$ -1089
- $\psi(2S)\eta$ -1090
- $\psi(2S)\phi$ -1091
- $\psi(2S)K^-K^+$ -1092
- $\psi(2S)\bar{K}^0K^0$ -1093
- $\psi(2S)\bar{K}^0K^+\pi^-$ -1094
- $\psi(2S)\bar{K}^0K^0\pi^0$ -1095
- $\psi(2S)K^-K^+\pi^0$ -1096
- $\psi(2S)\phi\pi^+\pi^-$ -1097
- $\psi(2S)\phi\pi^0\pi^0$ -1098
- $\psi(2S)\eta\pi^+\pi^-$ -1099

- $\psi(2S)\eta\pi^0\pi^0$ -1100
- $\psi(2S)\eta'\pi^+\pi^-$ -1101
- $\psi(2S)\eta'\pi^0\pi^0$ -1102
- $\psi(2S)\pi^+\pi^-$ -1103
- $\psi(2S)\pi^0\pi^0$ -1104
- $\chi_{c0}\eta'$ -1105
- $\chi_{c0}\eta$ -1106
- $\phi\chi_{c0}$ -1107
- $\chi_{c0}K^-K^+$ -1108
- $\chi_{c0}\bar{K}^0K^0$ -1109
- $\chi_{c0}\bar{K}^0K^+\pi^-$ -1110
- $\chi_{c0}\bar{K}^0K^0\pi^0$ -1111
- $\chi_{c0}K^-K^+\pi^0$ -1112
- $\chi_{c1}\eta'$ -1113
- $\chi_{c1}\eta$ -1114
- $\chi_{c1}\phi$ -1115
- $\chi_{c1}K^-K^+$ -1116
- $\chi_{c1}\bar{K}^0K^0$ -1117
- $\chi_{c1}\bar{K}^0K^+\pi^-$ -1118
- $\chi_{c1}\bar{K}^0K^0\pi^0$ -1119
- $\chi_{c1}K^-K^+\pi^0$ -1120
- $\chi_{c1}\phi\pi^+\pi^-$ -1121
- $\chi_{c1}\phi\pi^0\pi^0$ -1122
- $\chi_{c1}\eta\pi^+\pi^-$ -1123
- $\chi_{c1}\eta\pi^0\pi^0$ -1124

- $\chi_{c1}\eta'\pi^+\pi^-$ -1125
- $\chi_{c1}\eta'\pi^0\pi^0$ -1126
- $\chi_{c2}\eta'$ -1127
- $\chi_{c2}\eta$ -1128
- $\chi_{c2}K^-K^+$ -1129
- $\chi_{c2}\bar{K}^0K^0$ -1130
- $\chi_{c2}\bar{K}^0K^+\pi^-$ -1131
- $\chi_{c2}\bar{K}^0K^0\pi^0$ -1132
- $\chi_{c2}K^-K^+\pi^0$ -1133
- $\eta_c\eta'$ -1134
- $\eta_c\eta$ -1135
- $\phi\eta_c$ -1136
- $\eta_cK^-K^+$ -1137
- $\eta_c\bar{K}^0K^0$ -1138
- $\eta_c\bar{K}^0K^+\pi^-$ -1139
- $\eta_c\bar{K}^0K^0\pi^0$ -1140
- $\eta_cK^-K^+\pi^0$ -1141
- $\eta_c\phi\pi^+\pi^-$ -1142
- $\eta_c\phi\pi^0\pi^0$ -1143
- $\eta_c\eta\pi^+\pi^-$ -1144
- $\eta_c\eta\pi^0\pi^0$ -1145
- $\eta_c\eta'\pi^+\pi^-$ -1146
- $\eta_c\eta'\pi^0\pi^0$ -1147
- $\eta_c(2S)\eta'$ -1148
- $\eta_c(2S)\eta$ -1149

- $\phi\eta_c(2S)$ -1150
- $\eta_c(2S)K^-K^+$ -1151
- $\eta_c(2S)\bar{K}^0K^0$ -1152
- $\eta_c(2S)\bar{K}^0K^+\pi^-$ -1153
- $\eta_c(2S)\bar{K}^0K^0\pi^0$ -1154
- $\eta_c(2S)K^-K^+\pi^0$ -1155
- $h_c\eta'$ -1156
- $h_c\eta$ -1157
- $h_c\phi$ -1158
- $h_cK^-K^+$ -1159
- $h_c\bar{K}^0K^0$ -1160
- $h_c\bar{K}^0K^+\pi^-$ -1161
- $h_c\bar{K}^0K^0\pi^0$ -1162
- $h_cK^-K^+\pi^0$ -1163
- $J/\psi\phi\phi$ -1164
- $J/\psi K_S^0$ -1165
- $J/\psi\bar{K}^{*0}$ -1166
- $J/\psi\pi^+\pi^-\pi^+\pi^-$ -1167
- $J/\psi f_1$ -1168
- $\psi(2S)K^-\pi^+$ -1169
- $\psi(2S)\bar{K}^{*0}$ -1170
- $D_{s1}^+\pi^-$ -1171
- $D_{s1}^+\rho^-$ -1172
- $D_{s2}^{*+}\pi^-$ -1173
- $D_s^{*+}\pi^-$ -1174

- $D_s^+ \pi^-$ -1175
- $\rho^- D_s^+$ -1176
- $D_s^{*+} \rho^-$ -1177
- $a_1^- D_s^+$ -1178
- $D_s^+ \rho^0 \pi^-$ -1179
- $D_s^+ \rho^- \pi^0$ -1180
- $D_s^+ \pi^+ \pi^- \pi^-$ -1181
- $D_s^+ \pi^0 \pi^- \pi^0$ -1182
- $D_s^{*+} a_1^-$ -1183
- $D_s^{*+} \rho^0 \pi^-$ -1184
- $D_s^{*+} \rho^- \pi^0$ -1185
- $D_s^{*+} \pi^+ \pi^- \pi^-$ -1186
- $D_s^{*+} \pi^0 \pi^- \pi^0$ -1187
- $D^{*0} K^0$ -1188
- $D^0 K^0$ -1189
- $K^{*0} D^0$ -1190
- $D^{*0} K^{*0}$ -1191
- $p^+ \bar{p}^-$ -1192
- $cs_0 \bar{u} d_0$ -1193
- $cs_1 \bar{u} d_1$ -1194
- $\bar{u} d c \bar{s}$ -1195
- $\bar{u} d c \bar{s}$ -1196
- $\bar{u} c d \bar{s}$ -1197
- $\bar{c} s u \bar{s}$ -1198
- $\bar{u} s c \bar{s}$ -1199

- $\bar{u} s c \bar{s}$ -1200
- $\bar{u} c s \bar{s}$ -1201
- $\bar{c} d c \bar{s}$ -1202
- $\bar{c} d c \bar{s}$ -1203
- $\bar{u} u d \bar{s}$ -1204
- $\bar{d} d d \bar{s}$ -1205
- $\bar{s} s d \bar{s}$ -1206
- $\bar{u} u s \bar{s}$ -1207
- $\bar{d} d s \bar{s}$ -1208
- $\bar{s} s s \bar{s}$ -1209
- $s \bar{s}$ -1210
- $K^+ e^- \bar{\nu}_e$ -1211
- $K^{*+} e^- \bar{\nu}_e$ -1212
- $K_1^+ e^- \bar{\nu}_e$ -1213
- $K_1'^+ e^- \bar{\nu}_e$ -1214
- $K^+ \mu^- \bar{\nu}_\mu$ -1215
- $K^{*+} \mu^- \bar{\nu}_\mu$ -1216
- $K_1^+ \mu^- \bar{\nu}_\mu$ -1217
- $K_1'^+ \mu^- \bar{\nu}_\mu$ -1218
- $K^- K^+$ -1219
- $\bar{K}^0 K^0$ -1220
- $K_S^0 K_S^0$ -1221
- $K_L^0 K_L^0$ -1222
- $\pi^- K^+$ -1223
- $\pi^0 K^0$ -1224

- $\pi^+ \pi^-$ -1225
- $\omega \eta$ -1226
- $\omega \eta'$ -1227
- $\phi \eta$ -1228
- $\phi \eta'$ -1229
- $\omega \bar{K}^0$ -1230
- $\phi \bar{K}^0$ -1231
- $K^{*+} \pi^-$ -1232
- $\rho^- K^+$ -1233
- $\rho^0 K^0$ -1234
- $K^{*0} \pi^0$ -1235
- $K^{*-} K^+$ -1236
- $\bar{K}^{*0} K^0$ -1237
- $\bar{K}^{*0} K_S^0$ -1238
- $\bar{K}^{*0} K_L^0$ -1239
- $K^{*+} K^-$ -1240
- $K^{*0} \bar{K}^0$ -1241
- $K^{*0} K_S^0$ -1242
- $K^{*0} K_L^0$ -1243
- $\eta' \eta'$ -1244
- $\eta' \eta$ -1245
- $\eta \eta$ -1246
- $K^0 \eta'$ -1247
- $K^0 \eta$ -1248
- $K^{*0} \eta'$ -1249

- $K^{*0}\eta$ -1250
- $\rho^- K^{*+}$ -1251
- $\rho^0 K^{*0}$ -1252
- ωK^{*0} -1253
- $K^{*-} K^{*+}$ -1254

- $\bar{K}^{*0} K^{*0}$ -1255
- $\phi\phi$ -1256
- ϕK^{*0} -1257
- $\mu^- \mu^+$ -1258
- $\tau^- \tau^+$ -1259

- $\phi\gamma$ -1260
- $\phi e^- e^+$ -1261
- $\phi\mu^- \mu^+$ -1262
- $\gamma\gamma$ -1263
- $D_s^- K^+$ -1264

G   List of tag numbers for D^{*+} decays

Tag numbers for the 3 D^{*+} decays are following.

- $D^0 \pi^+$ $+1001$
- $D^+ \pi^0$ $+1002$
- $D^+ \gamma$ $+1003$

H   List of tag numbers for D^{*-} decays

Tag numbers for the 3 D^{*-} decays are following.

- $\bar{D}^0 \pi^-$ -1001
- $D^- \pi^0$ -1002
- $D^- \gamma$ -1003

I   List of tag numbers for D_s^+ decays

Tag numbers for the 84 D_s^+ decays are following.

- $\phi e^+ \nu_e$ $+1001$
- $\eta e^+ \nu_e$ $+1002$
- $\eta' e^+ \nu_e$ $+1003$
- $\bar{K}^0 e^+ \nu_e$ $+1004$
- $\bar{K}^{*0} e^+ \nu_e$ $+1005$
- $\phi\mu^+ \nu_\mu$ $+1006$
- $\eta\mu^+ \nu_\mu$ $+1007$
- $\eta'\mu^+ \nu_\mu$ $+1008$
- $\bar{K}^0 \mu^+ \nu_\mu$ $+1009$
- $\bar{K}^{*0} \mu^+ \nu_\mu$ $+1010$

- $\mu^+ \nu_\mu$ $+1011$
- $\tau^+ \nu_\tau$ $+1012$
- $\phi\pi^+$ $+1013$
- $\eta\pi^+$ $+1014$
- $\eta'\pi^+$ $+1015$
- $\omega\pi^+$ $+1016$
- $\rho^0 \pi^+$ $+1017$
- $\rho^+ \pi^0$ $+1018$
- $\pi^+ \pi^0$ $+1019$
- $f_0 \pi^+$ $+1020$

- $f_2 \pi^+$ $+1021$
- $\phi\rho^+$ $+1022$
- $\rho^+ \eta$ $+1023$
- $\rho^+ \eta'$ $+1024$
- $\pi^+ \pi^- \pi^+$ $+1025$
- $\pi^+ \pi^0 \pi^0$ $+1026$
- $\phi\pi^+ \pi^0$ $+1027$
- $\eta\pi^+ \pi^0$ $+1028$
- $\eta'\pi^+ \pi^0$ $+1029$
- $\phi\pi^+ \pi^- \pi^+$ $+1030$

- $\phi\pi^+\pi^0\pi^0$ $+1031$
- $\eta\pi^+\pi^-\pi^+$ $+1032$
- $\eta\pi^+\pi^0\pi^0$ $+1033$
- $K_S^0 K^+$ $+1034$
- $K_L^0 K^+$ $+1035$
- $\bar{K}^0 K^+$ $+1036$
- $\bar{K}^{*0} K^+$ $+1037$
- $K^{*+} \bar{K}^0$ $+1038$
- $\bar{K}^{*0} K^{*+}$ $+1039$
- $\bar{K}^0 K^+\pi^0$ $+1040$
- $\bar{K}^{*0} K^+\pi^0$ $+1041$
- $K^{*+}\bar{K}^0\pi^0$ $+1042$
- $\bar{K}^{*0} K^{*+}\pi^0$ $+1043$
- $K^+ K^-\pi^+$ $+1044$
- $K_S^0 K^+\pi^+\pi^-$ $+1045$
- $K_L^0 K^+\pi^+\pi^-$ $+1046$
- $\bar{K}^0 K^+\pi^+\pi^-$ $+1047$
- $\bar{K}^0 K^+\pi^0\pi^0$ $+1048$

- $K^+ K^-\pi^+\pi^-\pi^+$ $+1049$
- ϕK^+ $+1050$
- ηK^+ $+1051$
- $\eta' K^+$ $+1052$
- $\eta K^+\pi^0$ $+1053$
- $\eta K^+\pi^+\pi^-$ $+1054$
- $\eta' K^+\pi^0$ $+1055$
- $\eta' K^+\pi^+\pi^-$ $+1056$
- $K^+ K^- K^+$ $+1057$
- $K_S^0\pi^+$ $+1058$
- $K_L^0\pi^+$ $+1059$
- $K^0\pi^+$ $+1060$
- $\rho^+ K^0$ $+1061$
- $\rho^0 K^+$ $+1062$
- $K^0\pi^+\pi^0$ $+1063$
- $a_1^+ K^0$ $+1064$
- $K^{*0}\pi^+$ $+1065$
- $K^{*0}\rho^+$ $+1066$

- $K^{*0}\pi^+\pi^0$ $+1067$
- $K^+\pi^0$ $+1068$
- $K^+\pi^+\pi^-$ $+1069$
- $\pi^+\pi^+\pi^+\pi^-\pi^-$ $+1070$
- $\pi^+\pi^+\pi^+\pi^-\pi^-\pi^0$ $+1071$
- $p^+\bar{n}^0$ $+1072$
- $K_S^0 K_S^0\pi^+\pi^+\pi^-$ $+1073$
- $K_L^0 K_L^0\pi^+\pi^+\pi^-$ $+1074$
- $\bar{K}^0 K^0\pi^+\pi^+\pi^-$ $+1075$
- $K_S^0\pi^+\pi^+\pi^-$ $+1076$
- $K_L^0\pi^+\pi^+\pi^-$ $+1077$
- $\bar{K}^0\pi^+\pi^+\pi^-$ $+1078$
- $K^+ K^+\pi^-$ $+1079$
- $K^0 e^+\nu_e$ $+1080$
- $K^{*0} e^+\nu_e$ $+1081$
- $K^+ K^-\pi^+\pi^0$ $+1082$
- $\omega\pi^+\pi^0$ $+1083$
- $\omega\pi^+\pi^+\pi^-$ $+1084$

J   List of tag numbers for D_s^- decays

Tag numbers for the 84 D_s^- decays are following.

- $\phi e^-\bar{\nu}_e$ -1001
- $\eta e^-\bar{\nu}_e$ -1002
- $\eta' e^-\bar{\nu}_e$ -1003
- $K^0 e^-\bar{\nu}_e$ -1004
- $K^{*0} e^-\bar{\nu}_e$ -1005

- $\phi\mu^-\bar{\nu}_\mu$ -1006
- $\eta\mu^-\bar{\nu}_\mu$ -1007
- $\eta'\mu^-\bar{\nu}_\mu$ -1008
- $K^0\mu^-\bar{\nu}_\mu$ -1009
- $K^{*0}\mu^-\bar{\nu}_\mu$ -1010

- $\mu^-\bar{\nu}_\mu$ -1011
- $\tau^-\bar{\nu}_\tau$ -1012
- $\phi\pi^-$ -1013
- $\eta\pi^-$ -1014
- $\eta'\pi^-$ -1015

- $\omega\pi^-$ -1016
- $\rho^0\pi^-$ -1017
- $\rho^-\pi^0$ -1018
- $\pi^-\pi^0$ -1019
- $f_0\pi^-$ -1020
- $f_2\pi^-$ -1021
- $\phi\rho^-$ -1022
- $\rho^-\eta$ -1023
- $\rho^-\eta'$ -1024
- $\pi^-\pi^-\pi^+$ -1025
- $\pi^-\pi^0\pi^0$ -1026
- $\phi\pi^-\pi^0$ -1027
- $\eta\pi^-\pi^0$ -1028
- $\eta'\pi^-\pi^0$ -1029
- $\phi\pi^-\pi^-\pi^+$ -1030
- $\phi\pi^-\pi^0\pi^0$ -1031
- $\eta\pi^-\pi^-\pi^+$ -1032
- $\eta\pi^-\pi^0\pi^0$ -1033
- $K_S^0 K^-$ -1034
- $K_L^0 K^-$ -1035
- $K^0 K^-$ -1036
- $K^{*0} K^-$ -1037
- $K^{*-} K^0$ -1038

- $K^{*0} K^{*-}$ -1039
- $K^0 K^-\pi^0$ -1040
- $K^{*0} K^-\pi^0$ -1041
- $K^{*-} K^0\pi^0$ -1042
- $K^{*0} K^{*-}\pi^0$ -1043
- $K^+ K^-\pi^-$ -1044
- $K_S^0 K^-\pi^+\pi^-$ -1045
- $K_L^0 K^-\pi^+\pi^-$ -1046
- $K^0 K^-\pi^+\pi^-$ -1047
- $K^0 K^-\pi^0\pi^0$ -1048
- $K^- K^+\pi^-\pi^+\pi^-$ -1049
- ϕK^- -1050
- ηK^- -1051
- $\eta' K^-$ -1052
- $\eta K^-\pi^0$ -1053
- $\eta K^-\pi^+\pi^-$ -1054
- $\eta' K^-\pi^0$ -1055
- $\eta' K^-\pi^+\pi^-$ -1056
- $K^- K^- K^+$ -1057
- $K_S^0\pi^-$ -1058
- $K_L^0\pi^-$ -1059
- $\bar{K}^0\pi^-$ -1060
- $\rho^-\bar{K}^0$ -1061

- $\rho^0 K^-$ -1062
- $\bar{K}^0\pi^-\pi^0$ -1063
- $a_1^-\bar{K}^0$ -1064
- $\bar{K}^{*0}\pi^-$ -1065
- $\bar{K}^{*0}\rho^-$ -1066
- $\bar{K}^{*0}\pi^-\pi^0$ -1067
- $K^-\pi^0$ -1068
- $K^-\pi^+\pi^-$ -1069
- $\pi^+\pi^+\pi^-\pi^-\pi^-$ -1070
- $\pi^+\pi^+\pi^-\pi^-\pi^-\pi^0$ -1071
- $\bar{p}^-n^0$ -1072
- $K_S^0 K_S^0\pi^+\pi^-\pi^-$ -1073
- $K_L^0 K_L^0\pi^+\pi^-\pi^-$ -1074
- $\bar{K}^0 K^0\pi^+\pi^-\pi^-$ -1075
- $K_S^0\pi^+\pi^-\pi^-$ -1076
- $K_L^0\pi^+\pi^-\pi^-$ -1077
- $K^0\pi^+\pi^-\pi^-$ -1078
- $K^- K^-\pi^+$ -1079
- $\bar{K}^0 e^-\bar{\nu}_e$ -1080
- $\bar{K}^{*0} e^-\bar{\nu}_e$ -1081
- $K^- K^+\pi^-\pi^0$ -1082
- $\omega\pi^-\pi^0$ -1083
- $\omega\pi^-\pi^-\pi^+$ -1084

K List of tag numbers for D^+ decays

Tag numbers for the 84 D^+ decays are following.

- $\bar{K}^{*0}e^+\nu_e$ +1001
- $\bar{K}^0e^+\nu_e$ +1002
- $\bar{K}^0_1e^+\nu_e$ +1003
- $\bar{K}^{*0}_2e^+\nu_e$ +1004
- $\pi^0e^+\nu_e$ +1005
- $\eta e^+\nu_e$ +1006
- $\eta'e^+\nu_e$ +1007
- $\rho^0e^+\nu_e$ +1008
- $\omega e^+\nu_e$ +1009
- $K^-\pi^+e^+\nu_e$ +1010
- $\bar{K}^0\pi^0e^+\nu_e$ +1011
- $\bar{K}^{*0}\mu^+\nu_\mu$ +1012
- $\bar{K}^0\mu^+\nu_\mu$ +1013
- $\bar{K}^0_1\mu^+\nu_\mu$ +1014
- $\bar{K}^{*0}_2\mu^+\nu_\mu$ +1015
- $\pi^0\mu^+\nu_\mu$ +1016
- $\eta\mu^+\nu_\mu$ +1017
- $\eta'\mu^+\nu_\mu$ +1018
- $\rho^0\mu^+\nu_\mu$ +1019
- $\omega\mu^+\nu_\mu$ +1020
- $K^-\pi^+\mu^+\nu_\mu$ +1021
- $\bar{K}^0\pi^0\mu^+\nu_\mu$ +1022
- $\mu^+\nu_\mu$ +1023

- $\tau^+\nu_\tau$ +1024
- $K^0_S\pi^+$ +1025
- $K^0_L\pi^+$ +1026
- $\bar{K}^0\pi^+$ +1027
- $a_1^+K^0_S$ +1028
- $a_1^+K^0_L$ +1029
- $a_1^+\bar{K}^0$ +1030
- $\bar{K}'^0_1\pi^+$ +1031
- $\bar{K}^{*0}\rho^+$ +1032
- $K^-\pi^+\pi^+$ +1033
- $K^0_S\pi^+\pi^0$ +1034
- $K^0_L\pi^+\pi^0$ +1035
- $\bar{K}^0\pi^+\pi^0$ +1036
- $K^0_S\rho^0\pi^+$ +1037
- $K^0_L\rho^0\pi^+$ +1038
- $\bar{K}^0\rho^0\pi^+$ +1039
- $\bar{K}^0\omega\pi^+$ +1040
- $K^-\rho^+\pi^+$ +1041
- $K^{*-}\pi^+\pi^+$ +1042
- $\bar{K}^{*0}\pi^0\pi^+$ +1043
- $\bar{K}^{*0}\rho^0\pi^+$ +1044
- $\bar{K}^{*0}\omega\pi^+$ +1045
- $K^-\pi^+\pi^+\pi^0$ +1046

- $K^0_S\pi^+\pi^+\pi^-$ +1047
- $K^0_L\pi^+\pi^+\pi^-$ +1048
- $\bar{K}^0\pi^+\pi^+\pi^-$ +1049
- $K^-\pi^+\pi^+\pi^+\pi^-$ +1050
- $K^-\pi^+\pi^+\pi^0\pi^0$ +1051
- $\bar{K}^0\pi^+\pi^+\pi^-\pi^0$ +1052
- $\bar{K}^0\pi^+\pi^0\pi^0\pi^0$ +1053
- $K^0_SK^0_SK^+$ +1054
- $K^0_LK^0_LK^+$ +1055
- $\bar{K}^0\bar{K}^0K^+$ +1056
- $\phi\pi^+$ +1057
- $\phi\pi^+\pi^0$ +1058
- $K^0_SK^+$ +1059
- $K^0_LK^+$ +1060
- $\bar{K}^0K^+$ +1061
- $\bar{K}^{*0}K^+$ +1062
- $K^{*+}K^0_S$ +1063
- $K^{*+}K^0_L$ +1064
- $K^{*+}\bar{K}^0$ +1065
- $K^+K^-\pi^+$ +1066
- $K^+\bar{K}^0\pi^0$ +1067
- $\bar{K}^0K^0\pi^+$ +1068
- $K^{*+}K^-\pi^+$ +1069

- $K^+K^{*-}\pi^+$ +1070
- $K^{*+}\bar{K}^0\pi^0$ +1071
- $K^+\bar{K}^{*0}\pi^0$ +1072
- $\bar{K}^{*0}K^0\pi^+$ +1073
- $\bar{K}^0K^{*0}\pi^+$ +1074
- $\pi^0\pi^+$ +1075
- $\rho^0\pi^+$ +1076
- $\pi^+\pi^+\pi^-$ +1077
- $\pi^+\pi^0\pi^0$ +1078
- $\pi^+\pi^+\pi^-\pi^0$ +1079
- $\pi^+\pi^0\pi^0\pi^0$ +1080
- $\eta\pi^+$ +1081

- $\eta'\pi^+$ +1082
- $\eta\pi^+\pi^0$ +1083
- $\eta\pi^+\pi^+\pi^-$ +1084
- $\eta\pi^+\pi^0\pi^0$ +1085
- $\pi^+\pi^+\pi^+\pi^-\pi^-$ +1086
- $K^+K^-\pi^+\pi^0$ +1087
- $K^+K_S^0\pi^+\pi^-$ +1088
- $K^+K_L^0\pi^+\pi^-$ +1089
- $K^+\bar{K}^0\pi^+\pi^-$ +1090
- $K_S^0K^-\pi^+\pi^+$ +1091
- $K_L^0K^-\pi^+\pi^+$ +1092
- $K^0K^-\pi^+\pi^+$ +1093

- $K^+K^-\pi^+\pi^+\pi^-$ +1094
- $K^+K^-K_S^0\pi^+$ +1095
- $K^+K^-K_L^0\pi^+$ +1096
- $K^+K^-\bar{K}^0\pi^+$ +1097
- $\bar{K}^{*0}a_1^+$ +1098
- $K^+\pi^0$ +1099
- $K^+\pi^+\pi^-$ +1100
- $K^+K^+K^-$ +1101
- $K^-\rho^0\pi^+\pi^+$ +1102
- $\eta'\pi^+\pi^0$ +1103
- $K^+\rho^0$ +1104

L   List of tag numbers for D^- decays

Tag numbers for the 84 D^- decays are following.

- $K^{*0}e^-\bar{\nu}_e$ −1001
- $K^0e^-\bar{\nu}_e$ −1002
- $K_1^0e^-\bar{\nu}_e$ −1003
- $K_2^{*0}e^-\bar{\nu}_e$ −1004
- $\pi^0e^-\bar{\nu}_e$ −1005
- $\eta e^-\bar{\nu}_e$ −1006
- $\eta'e^-\bar{\nu}_e$ −1007
- $\rho^0e^-\bar{\nu}_e$ −1008
- $\omega e^-\bar{\nu}_e$ −1009
- $K^+\pi^-e^-\bar{\nu}_e$ −1010
- $K^0\pi^0e^-\bar{\nu}_e$ −1011

- $K^{*0}\mu^-\bar{\nu}_\mu$ −1012
- $K^0\mu^-\bar{\nu}_\mu$ −1013
- $K_1^0\mu^-\bar{\nu}_\mu$ −1014
- $K_2^{*0}\mu^-\bar{\nu}_\mu$ −1015
- $\pi^0\mu^-\bar{\nu}_\mu$ −1016
- $\eta\mu^-\bar{\nu}_\mu$ −1017
- $\eta'\mu^-\bar{\nu}_\mu$ −1018
- $\rho^0\mu^-\bar{\nu}_\mu$ −1019
- $\omega\mu^-\bar{\nu}_\mu$ −1020
- $K^+\pi^-\mu^-\bar{\nu}_\mu$ −1021
- $K^0\pi^0\mu^-\bar{\nu}_\mu$ −1022

- $\mu^-\bar{\nu}_\mu$ −1023
- $\tau^-\bar{\nu}_\tau$ −1024
- $K_S^0\pi^-$ −1025
- $K_L^0\pi^-$ −1026
- $K^0\pi^-$ −1027
- $a_1^-K_S^0$ −1028
- $a_1^-K_L^0$ −1029
- $a_1^-K^0$ −1030
- $K_1'^0\pi^-$ −1031
- $K^{*0}\rho^-$ −1032
- $K^+\pi^-\pi^-$ −1033

- $K_S^0 \pi^- \pi^0$ -1034
- $K_L^0 \pi^- \pi^0$ -1035
- $K^0 \pi^- \pi^0$ -1036
- $K_S^0 \rho^0 \pi^-$ -1037
- $K_L^0 \rho^0 \pi^-$ -1038
- $K^0 \rho^0 \pi^-$ -1039
- $K^0 \omega \pi^-$ -1040
- $K^+ \rho^- \pi^-$ -1041
- $K^{*+} \pi^- \pi^-$ -1042
- $K^{*0} \pi^0 \pi^-$ -1043
- $K^{*0} \rho^0 \pi^-$ -1044
- $K^{*0} \omega \pi^-$ -1045
- $K^+ \pi^- \pi^- \pi^0$ -1046
- $K_S^0 \pi^- \pi^- \pi^+$ -1047
- $K_L^0 \pi^- \pi^- \pi^+$ -1048
- $K^0 \pi^- \pi^- \pi^+$ -1049
- $K^+ \pi^- \pi^- \pi^- \pi^+$ -1050
- $K^+ \pi^- \pi^- \pi^0 \pi^0$ -1051
- $K^0 \pi^- \pi^- \pi^+ \pi^0$ -1052
- $K^0 \pi^- \pi^0 \pi^0 \pi^0$ -1053
- $K_S^0 K_S^0 K^-$ -1054
- $K_L^0 K_L^0 K^-$ -1055
- $K^0 K^0 K^-$ -1056
- $\phi \pi^-$ -1057

- $\phi \pi^- \pi^0$ -1058
- $K_S^0 K^-$ -1059
- $K_L^0 K^-$ -1060
- $K^0 K^-$ -1061
- $K^{*0} K^-$ -1062
- $K^{*-} K_S^0$ -1063
- $K^{*-} K_L^0$ -1064
- $K^{*-} K^0$ -1065
- $K^- K^+ \pi^-$ -1066
- $K^- K^0 \pi^0$ -1067
- $\bar{K}^0 K^0 \pi^-$ -1068
- $K^{*-} K^+ \pi^-$ -1069
- $K^- K^{*+} \pi^-$ -1070
- $K^{*-} K^0 \pi^0$ -1071
- $K^- K^{*0} \pi^0$ -1072
- $K^{*0} \bar{K}^0 \pi^-$ -1073
- $K^0 \bar{K}^{*0} \pi^-$ -1074
- $\pi^0 \pi^-$ -1075
- $\rho^0 \pi^-$ -1076
- $\pi^- \pi^+ \pi^-$ -1077
- $\pi^- \pi^0 \pi^0$ -1078
- $\pi^- \pi^+ \pi^- \pi^0$ -1079
- $\pi^- \pi^0 \pi^0 \pi^0$ -1080
- $\eta \pi^-$ -1081

- $\eta' \pi^-$ -1082
- $\eta \pi^- \pi^0$ -1083
- $\eta \pi^- \pi^+ \pi^-$ -1084
- $\eta \pi^- \pi^0 \pi^0$ -1085
- $\pi^+ \pi^- \pi^+ \pi^- \pi^-$ -1086
- $K^{*0} a_1^-$ -1087
- $K^+ K^- \pi^- \pi^0$ -1088
- $K^- K_S^0 \pi^+ \pi^-$ -1089
- $K^- K_L^0 \pi^+ \pi^-$ -1090
- $K^- K^0 \pi^+ \pi^-$ -1091
- $K_S^0 K^+ \pi^- \pi^-$ -1092
- $K_L^0 K^+ \pi^- \pi^-$ -1093
- $\bar{K}^0 K^+ \pi^- \pi^-$ -1094
- $K^+ K^- \pi^+ \pi^- \pi^-$ -1095
- $K^+ K^- K_S^0 \pi^-$ -1096
- $K^+ K^- K_L^0 \pi^-$ -1097
- $K^+ K^- K^0 \pi^-$ -1098
- $K^- \pi^0$ -1099
- $K^- \pi^+ \pi^-$ -1100
- $K^- K^+ K^-$ -1101
- $K^+ \rho^0 \pi^- \pi^-$ -1102
- $\eta' \pi^- \pi^0$ -1103
- $K^- \rho^0$ -1104

M List of tag numbers for D^0 decays

Tag numbers for the 136 D^0 decays are following.

- $K^{*-}e^+\nu_e$ +1001
- $K^-e^+\nu_e$ +1002
- $K_1^-e^+\nu_e$ +1003
- $K_2^{*-}e^+\nu_e$ +1004
- $\pi^-e^+\nu_e$ +1005
- $\rho^-e^+\nu_e$ +1006
- $\bar{K}^0\pi^-e^+\nu_e$ +1007
- $K^-\pi^0e^+\nu_e$ +1008
- $K^{*-}\mu^+\nu_\mu$ +1009
- $K^-\mu^+\nu_\mu$ +1010
- $K_1^-\mu^+\nu_\mu$ +1011
- $K_2^{*-}\mu^+\nu_\mu$ +1012
- $\pi^-\mu^+\nu_\mu$ +1013
- $\rho^-\mu^+\nu_\mu$ +1014
- $\bar{K}^0\pi^-\mu^+\nu_\mu$ +1015
- $K^-\pi^0\mu^+\nu_\mu$ +1016
- $K^-\pi^+$ +1017
- $K_S^0\pi^0$ +1018
- $K_L^0\pi^0$ +1019
- $\bar{K}^0\pi^0$ +1020
- $K_S^0\eta$ +1021
- $K_L^0\eta$ +1022
- $\bar{K}^0\eta$ +1023

- $K_S^0\eta'$ +1024
- $K_L^0\eta'$ +1025
- $\bar{K}^0\eta'$ +1026
- ωK_S^0 +1027
- ωK_L^0 +1028
- $\omega\bar{K}^0$ +1029
- $\bar{K}^{*0}\eta$ +1030
- $\bar{K}^{*0}\eta'$ +1031
- $a_1^+K^-$ +1032
- $K^{*-}\rho^+$ +1033
- $\bar{K}^{*0}\rho^0$ +1034
- $\bar{K}^{*0}\omega$ +1035
- $K^-\pi^+\pi^0$ +1036
- $K^*BR\pi^0$ +1037
- $K_1^-\pi^+$ +1038
- $\bar{K}_1^0\pi^0$ +1039
- $K_S^0\pi^+\pi^-$ +1040
- $K_L^0\pi^+\pi^-$ +1041
- $\bar{K}^0\pi^+\pi^-$ +1042
- $K_S^0\pi^0\pi^0$ +1043
- $K_L^0\pi^0\pi^0$ +1044
- $\bar{K}^0\pi^0\pi^0$ +1045
- $\bar{K}^{*0}\pi^+\pi^-$ +1046

- $\bar{K}^{*0}\pi^0\pi^0$ +1047
- $K^{*-}\pi^+\pi^0$ +1048
- $K^-\rho^+\pi^0$ +1049
- $K^-\pi^+\rho^0$ +1050
- $K^-\pi^+\omega$ +1051
- $K^-\pi^+\eta$ +1052
- $K^-\pi^+\eta'$ +1053
- $K^-\pi^+\pi^+\pi^-$ +1054
- $K_S^0\pi^+\pi^-\pi^0$ +1055
- $K_L^0\pi^+\pi^-\pi^0$ +1056
- $\bar{K}^0\pi^+\pi^-\pi^0$ +1057
- $K^-\pi^+\pi^+\pi^-\pi^0$ +1058
- $K^-\pi^+\pi^0\pi^0\pi^0$ +1059
- $K_S^0\pi^+\pi^-\pi^+\pi^-$ +1060
- $K_L^0\pi^+\pi^-\pi^+\pi^-$ +1061
- $\bar{K}^0\pi^+\pi^-\pi^+\pi^-$ +1062
- ϕK_S^0 +1063
- ϕK_L^0 +1064
- $\phi\bar{K}^0$ +1065
- $K_S^0K^+K^-$ +1066
- $K_L^0K^+K^-$ +1067
- $\bar{K}^0K^+K^-$ +1068
- $K_S^0K_S^0K_S^0$ +1069

- K^+K^- +1070
- $K^0_S K^0_S$ +1071
- $K^0_L K^0_L$ +1072
- $K^{*0}\bar{K}^0$ +1073
- $\bar{K}^{*0}K^0_S$ +1074
- $\bar{K}^{*0}K^0_L$ +1075
- $\bar{K}^{*0}K^0$ +1076
- $K^{*-}K^+$ +1077
- $K^{*+}K^-$ +1078
- $\bar{K}^{*0}K^{*0}$ +1079
- $\phi\pi^0$ +1080
- $\phi\pi^+\pi^-$ +1081
- $K^+K^-\pi^+\pi^-$ +1082
- $K^+K^-\pi^0\pi^0$ +1083
- $K^0_S K^0_S \pi^+\pi^-$ +1084
- $K^0_L K^0_L \pi^+\pi^-$ +1085
- $\bar{K}^0 K^0 \pi^+\pi^-$ +1086
- $\bar{K}^0 K^0 \pi^0\pi^0$ +1087
- $\pi^+\pi^-$ +1088
- $\pi^0\pi^0$ +1089
- $\eta\pi^0$ +1090
- $\eta'\pi^0$ +1091
- $\eta\eta$ +1092

- $\rho^+\pi^-$ +1093
- $\rho^-\pi^+$ +1094
- $\rho^0\pi^0$ +1095
- $\pi^+\pi^-\pi^0$ +1096
- $\pi^0\pi^0\pi^0$ +1097
- $\pi^+\pi^+\pi^-\pi^-$ +1098
- $\pi^+\pi^-\pi^0\pi^0$ +1099
- $\pi^+\pi^-\pi^+\pi^-\pi^0$ +1100
- $\pi^+\pi^-\pi^0\pi^0\pi^0$ +1101
- $\pi^+\pi^-\pi^+\pi^-\pi^+\pi^-$ +1102
- π^-K^+ +1103
- π^-K^{*+} +1104
- $\pi^-K^+\pi^0$ +1105
- $K^+\pi^-\pi^+\pi^-$ +1106
- $\mu^+\mu^-$ +1107
- $\phi\eta$ +1108
- $\bar{K}^{*0}\pi^+\pi^-\pi^0$ +1109
- $K^-\pi^+\pi^-\pi^+\pi^-\pi^+$ +1110
- $K^+K^-\pi^0$ +1111
- $K^+K^-\pi^+\pi^-\pi^0$ +1112
- $K^+K^-K^-\pi^+$ +1113
- $K^0_S\eta\pi^0$ +1114
- $K^0_L\eta\pi^0$ +1115

- $\bar{K}^0\eta\pi^0$ +1116
- $K^0_S K^+\pi^-$ +1117
- $K^0_L K^+\pi^-$ +1118
- $\bar{K}^0 K^+\pi^-$ +1119
- $K^0_S K^-\pi^+$ +1120
- $K^0_L K^-\pi^+$ +1121
- $K^0 K^-\pi^+$ +1122
- $K^0_S K^0_S K^+\pi^-$ +1123
- $K^0_L K^0_L K^+\pi^-$ +1124
- $\bar{K}^0 K^0 K^+\pi^-$ +1125
- $K^0_S K^0_S K^-\pi^+$ +1126
- $K^0_L K^0_L K^-\pi^+$ +1127
- $\bar{K}^0 K^0 K^-\pi^+$ +1128
- $K^-\pi^+\pi^-e^+\nu_e$ +1129
- $\rho^0\rho^0$ +1130
- $\eta\pi^+\pi^-$ +1131
- $\omega\pi^+\pi^-$ +1132
- $\eta'\pi^+\pi^-$ +1133
- $\eta\eta'$ +1134
- $\phi\gamma$ +1135
- $\bar{K}^{*0}\gamma$ +1136

N   List of tag numbers for $\bar{D}^0$ decays

Tag numbers for the 136 $\bar{D}^0$ decays are following.

- $K^{*+}e^-\bar\nu_e$ -1001
- $K^+e^-\bar\nu_e$ -1002
- $K_1^+e^-\bar\nu_e$ -1003
- $K_2^{*+}e^-\bar\nu_e$ -1004
- $\pi^+e^-\bar\nu_e$ -1005
- $\rho^+e^-\bar\nu_e$ -1006
- $K^0\pi^+e^-\bar\nu_e$ -1007
- $K^+\pi^0e^-\bar\nu_e$ -1008
- $K^{*+}\mu^-\bar\nu_\mu$ -1009
- $K^+\mu^-\bar\nu_\mu$ -1010
- $K_1^+\mu^-\bar\nu_\mu$ -1011
- $K_2^{*+}\mu^-\bar\nu_\mu$ -1012
- $\pi^+\mu^-\bar\nu_\mu$ -1013
- $\rho^+\mu^-\bar\nu_\mu$ -1014
- $K^0\pi^+\mu^-\bar\nu_\mu$ -1015
- $K^+\pi^0\mu^-\bar\nu_\mu$ -1016
- $K^+\pi^-$ -1017
- $K_S^0\pi^0$ -1018
- $K_L^0\pi^0$ -1019
- $K^0\pi^0$ -1020
- $K_S^0\eta$ -1021
- $K_L^0\eta$ -1022
- $K^0\eta$ -1023
- $K_S^0\eta'$ -1024
- $K_L^0\eta'$ -1025

- $K^0\eta'$ -1026
- ωK_S^0 -1027
- ωK_L^0 -1028
- ωK^0 -1029
- $K^{*0}\eta$ -1030
- $K^{*0}\eta'$ -1031
- $a_1^-K^+$ -1032
- $K^{*+}\rho^-$ -1033
- $K^{*0}\rho^0$ -1034
- $K^{*0}\omega$ -1035
- $K^+\pi^-\pi^0$ -1036
- $K^{*0}R\pi^0$ -1037
- $K_1^+\pi^-$ -1038
- $K_1^0\pi^0$ -1039
- $K^0\pi^+\pi^-$ -1040
- $K_S^0\pi^+\pi^-$ -1041
- $K_L^0\pi^+\pi^-$ -1042
- $K_S^0\pi^0\pi^0$ -1043
- $K_L^0\pi^0\pi^0$ -1044
- $K^0\pi^0\pi^0$ -1045
- $K^{*0}\pi^+\pi^-$ -1046
- $K^{*0}\pi^0\pi^0$ -1047
- $K^{*+}\pi^-\pi^0$ -1048
- $K^+\rho^-\pi^0$ -1049
- $K^+\pi^-\rho^0$ -1050

- $K^+\pi^-\omega$ -1051
- $K^+\pi^-\eta$ -1052
- $K^+\pi^-\eta'$ -1053
- $K^+\pi^-\pi^+\pi^-$ -1054
- $K_S^0\pi^+\pi^-\pi^0$ -1055
- $K_L^0\pi^+\pi^-\pi^0$ -1056
- $K^0\pi^+\pi^-\pi^0$ -1057
- $K^+\pi^-\pi^+\pi^-\pi^0$ -1058
- $K^+\pi^-\pi^0\pi^0\pi^0$ -1059
- $K_S^0\pi^+\pi^-\pi^+\pi^-$ -1060
- $K_L^0\pi^+\pi^-\pi^+\pi^-$ -1061
- $K^0\pi^+\pi^-\pi^+\pi^-$ -1062
- ϕK_S^0 -1063
- ϕK_L^0 -1064
- ϕK^0 -1065
- $K_S^0K^+K^-$ -1066
- $K_L^0K^+K^-$ -1067
- $K^0K^+K^-$ -1068
- $K_S^0K_S^0K_S^0$ -1069
- K^+K^- -1070
- $K_S^0K_S^0$ -1071
- $K_L^0K_L^0$ -1072
- $\bar K^{*0}K^0$ -1073
- $K^{*0}K_S^0$ -1074
- $K^{*0}K_L^0$ -1075

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- $K^{*0}\bar{K}^0$ -1076
- $K^{*+}K^-$ -1077
- $K^{*-}K^+$ -1078
- $K^{*0}\bar{K}^{*0}$ -1079
- $\phi\pi^0$ -1080
- $\phi\pi^+\pi^-$ -1081
- $K^+K^-\pi^+\pi^-$ -1082
- $K^+K^-\pi^0\pi^0$ -1083
- $K^0_S K^0_S \pi^+\pi^-$ -1084
- $K^0_L K^0_L \pi^+\pi^-$ -1085
- $\bar{K}^0 K^0 \pi^+\pi^-$ -1086
- $\bar{K}^0 K^0 \pi^0\pi^0$ -1087
- $\pi^+\pi^-$ -1088
- $\pi^0\pi^0$ -1089
- $\eta\pi^0$ -1090
- $\eta'\pi^0$ -1091
- $\eta\eta$ -1092
- $\rho^+\pi^-$ -1093
- $\rho^-\pi^+$ -1094
- $\rho^0\pi^0$ -1095
- $\pi^+\pi^-\pi^0$ -1096

- $\pi^0\pi^0\pi^0$ -1097
- $\pi^+\pi^+\pi^-\pi^-$ -1098
- $\pi^+\pi^-\pi^0\pi^0$ -1099
- $\pi^+\pi^-\pi^+\pi^-\pi^0$ -1100
- $\pi^+\pi^-\pi^0\pi^0\pi^0$ -1101
- $\pi^+\pi^-\pi^+\pi^-\pi^+\pi^-$ -1102
- π^+K^- -1103
- π^+K^{*-} -1104
- $\pi^+K^-\pi^0$ -1105
- $K^-\pi^+\pi^+\pi^-$ -1106
- $\mu^-\mu^+$ -1107
- $\phi\eta$ -1108
- $K^{*0}\pi^+\pi^-\pi^0$ -1109
- $K^+\pi^-\pi^-\pi^+\pi^-\pi^+$ -1110
- $K^+K^-\pi^0$ -1111
- $K^+K^-\pi^+\pi^-\pi^0$ -1112
- $K^+K^+K^-\pi^-$ -1113
- $K^0_S \eta\pi^0$ -1114
- $K^0_L \eta\pi^0$ -1115
- $K^0 \eta\pi^0$ -1116
- $K^0_S K^-\pi^+$ -1117

- $K^0_L K^-\pi^+$ -1118
- $K^0 K^-\pi^+$ -1119
- $K^0_S K^+\pi^-$ -1120
- $K^0_L K^+\pi^-$ -1121
- $\bar{K}^0 K^+\pi^-$ -1122
- $K^0_S K^0_S K^+\pi^-$ -1123
- $K^0_L K^0_L K^+\pi^-$ -1124
- $\bar{K}^0 K^0 K^+\pi^-$ -1125
- $K^0_S K^0_S K^-\pi^+$ -1126
- $K^0_L K^0_L K^-\pi^+$ -1127
- $\bar{K}^0 K^0 K^-\pi^+$ -1128
- $K^+\pi^-\pi^+e^-\bar{\nu}_e$ -1129
- $\rho^0\rho^0$ -1130
- $\eta\pi^-\pi^+$ -1131
- $\omega\pi^-\pi^+$ -1132
- $\eta'\pi^-\pi^+$ -1133
- $\eta\eta'$ -1134
- $\phi\gamma$ -1135
- $K^{*0}\gamma$ -1136

O   List of tag numbers for τ^+ decays

Tag numbers for the 50 τ^+ decays are following.

- $e^+\nu_e\bar{\nu}_\tau$ $+1001$
- $\mu^+\nu_\mu\bar{\nu}_\tau$ $+1002$
- $\pi^+\bar{\nu}_\tau$ $+1003$
- $K^+\bar{\nu}_\tau$ $+1004$
- $\pi^+\pi^0\bar{\nu}_\tau$ $+1005$
- $\bar{\nu}_\tau\gamma\pi^+\pi^0$ $+1006$

- $\pi^0\pi^0\pi^+\bar{\nu}_\tau$ +1007
- $\bar{\nu}_\tau K^+\pi^0\pi^0$ +1008
- $\bar{\nu}_\tau\pi^+\pi^0\pi^0\pi^0$ +1009
- $\bar{\nu}_\tau\pi^+\pi^0\pi^0\pi^0\pi^0$ +1010
- $\bar{\nu}_\tau\pi^+K^0$ +1011
- $\bar{\nu}_\tau K^+\bar{K}^0$ +1012
- $\bar{\nu}_\tau\bar{K}^0\pi^+K^0$ +1013
- $\bar{\nu}_\tau K^+\pi^0\bar{K}^0$ +1014
- $\bar{\nu}_\tau\pi^+K^0\pi^0$ +1015
- $\pi^+\pi^+\pi^-\bar{\nu}_\tau$ +1016
- $\bar{\nu}_\tau\pi^+\pi^-\pi^+\pi^0$ +1017
- $\bar{\nu}_\tau\pi^+\pi^+\pi^-\pi^0\pi^0$ +1018
- $\bar{\nu}_\tau\pi^+\pi^+\pi^-\pi^0\pi^0\pi^0$ +1019
- $\bar{\nu}_\tau K^+\pi^-\pi^+$ +1020
- $\bar{\nu}_\tau K^+\pi^-\pi^+\pi^0$ +1021

- $\bar{\nu}_\tau K^+\pi^+K^-$ +1022
- $\bar{\nu}_\tau K^+K^-K^+$ +1023
- $\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-$ +1024
- $\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-\pi^0$ +1025
- $K^{*+}\bar{\nu}_\tau$ +1026
- $\bar{\nu}_\tau\eta\pi^+\pi^0$ +1027
- $\bar{\nu}_\tau\pi^+\omega\pi^0$ +1028
- $\bar{\nu}_\tau K^+\omega$ +1029
- $K^{*0}\pi^+\bar{\nu}_\tau$ +1030
- $\bar{K}^{*0}K^+\bar{\nu}_\tau$ +1031
- $\phi\pi^+\bar{\nu}_\tau$ +1032
- $\phi K^+\bar{\nu}_\tau$ +1033
- $\mu^+\nu_\mu\bar{\nu}_\tau\gamma$ +1034
- $e^+\nu_e\bar{\nu}_\tau\gamma$ +1035
- $K^+\pi^0\bar{\nu}_\tau$ +1036

- $K^0\rho^+\bar{\nu}_\tau$ +1037
- $\pi^+K^0\pi^0\pi^0\bar{\nu}_\tau$ +1038
- $\pi^+\bar{K}^0K^0\pi^0\bar{\nu}_\tau$ +1039
- $K^+K^-\pi^+\pi^0\bar{\nu}_\tau$ +1040
- $e^+e^+e^-\nu_e\bar{\nu}_\tau$ +1041
- $K_1^+\bar{\nu}_\tau$ +1042
- $K_1'^+\bar{\nu}_\tau$ +1043
- $K'^{*+}\bar{\nu}_\tau$ +1044
- $\eta\pi^+\pi^0\pi^0\bar{\nu}_\tau$ +1045
- $\eta K^+\bar{\nu}_\tau$ +1046
- $\eta K^{*+}\bar{\nu}_\tau$ +1047
- $\eta K^+\pi^0\bar{\nu}_\tau$ +1048
- $\eta K^0\pi^+\bar{\nu}_\tau$ +1049
- $f_1\pi^+\bar{\nu}_\tau$ +1050

P List of tag numbers for τ^- decays

Tag numbers for the 50 τ^- decays are following.

- $e^-\bar{\nu}_e\nu_\tau$ −1001
- $\mu^-\bar{\nu}_\mu\nu_\tau$ −1002
- $\pi^-\nu_\tau$ −1003
- $K^-\nu_\tau$ −1004
- $\pi^-\pi^0\nu_\tau$ −1005
- $\nu_\tau\gamma\pi^-\pi^0$ −1006
- $\pi^0\pi^0\pi^-\nu_\tau$ −1007
- $\nu_\tau K^-\pi^0\pi^0$ −1008

- $\nu_\tau\pi^-\pi^0\pi^0\pi^0$ −1009
- $\nu_\tau\pi^-\pi^0\pi^0\pi^0\pi^0$ −1010
- $\nu_\tau\pi^-\bar{K}^0$ −1011
- $\nu_\tau K^-K^0$ −1012
- $\nu_\tau K^0\pi^-\bar{K}^0$ −1013
- $\nu_\tau K^-\pi^0K^0$ −1014
- $\nu_\tau\pi^-\bar{K}^0\pi^0$ −1015
- $\pi^-\pi^-\pi^+\nu_\tau$ −1016

- $\nu_\tau\pi^-\pi^+\pi^-\pi^0$ −1017
- $\nu_\tau\pi^-\pi^-\pi^+\pi^0\pi^0$ −1018
- $\nu_\tau\pi^-\pi^-\pi^+\pi^0\pi^0\pi^0$ −1019
- $\nu_\tau K^-\pi^+\pi^-$ −1020
- $\nu_\tau K^-\pi^+\pi^-\pi^0$ −1021
- $\nu_\tau K^-\pi^-K^+$ −1022
- $\nu_\tau K^-K^+K^-$ −1023
- $\nu_\tau\pi^-\pi^-\pi^-\pi^+\pi^+$ −1024

- $\nu_\tau \pi^- \pi^- \pi^- \pi^+ \pi^+ \pi^0$ -1025
- $K^{*-} \nu_\tau$ -1026
- $\nu_\tau \eta \pi^- \pi^0$ -1027
- $\nu_\tau \pi^- \omega \pi^0$ -1028
- $\nu_\tau K^- \omega$ -1029
- $\bar{K}^{*0} \pi^- \nu_\tau$ -1030
- $K^{*0} K^- \nu_\tau$ -1031
- $\phi \pi^- \nu_\tau$ -1032
- $\phi K^- \nu_\tau$ -1033

- $\mu^- \bar{\nu}_\mu \nu_\tau \gamma$ -1034
- $e^- \bar{\nu}_e \nu_\tau \gamma$ -1035
- $K^- \pi^0 \nu_\tau$ -1036
- $\bar{K}^0 \rho^- \nu_\tau$ -1037
- $\pi^- \bar{K}^0 \pi^0 \pi^0 \nu_\tau$ -1038
- $\pi^- K^0 \bar{K}^0 \pi^0 \nu_\tau$ -1039
- $K^- K^+ \pi^- \pi^0 \nu_\tau$ -1040
- $e^- e^- e^+ \bar{\nu}_e \nu_\tau$ -1041
- $K_1^- \nu_\tau$ -1042

- $K_1'^- \nu_\tau$ -1043
- $K'^{*-} \nu_\tau$ -1044
- $\eta \pi^- \pi^0 \pi^0 \nu_\tau$ -1045
- $\eta K^- \nu_\tau$ -1046
- $\eta K^{*-} \nu_\tau$ -1047
- $\eta K^- \pi^0 \nu_\tau$ -1048
- $\eta \bar{K}^0 \pi^- \nu_\tau$ -1049
- $f_1 \pi^- \nu_\tau$ -1050

References

[1] M. Tanabashi et al. (Particle Data Group), Phys. Rev. D 98, 030001 (2018)